



Please mark your calendar for the next General Membership Meeting

Wednesday, 1 February 2023

This will be a 'Dinner Meeting' with Barbara Albrecht updating the community on various water quality and environmental matters.

Doors open at 5:30 PM. Dinner will be served at 6:00 PM.

Dinner will be smoked fish tacos, brown rice, and salad.

Come and build your own tacos, and learn about what the BFA has been doing since we last met.

Cost \$10.00/person

1615 East LaRua Street, Pensacola

Happy New Year Everyone!

Thank you to everyone who attended and supported the Bream Fishermen Picnic in December 2022. A big shout out to Katie Dineen and her accomplished musician friends who played wonderful original tunes for us; to Mary and the Pensacola Arts Market for coordinating and bringing the local and talented artisans, Mark Anderson for catching and smoking mullet, the terrific BFA Board for making it all possible, and all our friends and you who urged us to have a picnic, re-unite and remind our community to care about our local waterways and surrounding habitats.

The last three years have been so difficult for every one of us. We've lost so many, including founders, board members, and friends in our society. They say that when a person dies, it is as if a library has burned to the ground. Their embedded memories, the conditions of an area at a particular time and place, create the culture of the community that person was a part of, and their traditions become the heritage the community observed.

Since our last BFA General Membership Meeting in Feb 2020, too many *libraries*, historic books have been turned to ashes. And sadly, among those ashes we've lost many first-hand accounts of the landscape, the condition of area

waters, the history, the culture, and the heritage of our region. It is one thing to read about a time in the past; it is another to hear it told by those who lived it.

When I moved to Pensacola in 1983 to attend UWF, I left the bustling urbanized city of Miami which had just endured years of adjustment from the influx of Cuban immigrants during the Mariel boat lift. To my eyes, Pensacola was the rural outback. Back then, Gulf Breeze had one traffic light (Hwy 98 & FairPoint Dr), it cost 35 cents (toll) to get to Pensacola Beach, the PNJ published two newspapers daily, the morning and the evening editions - which had real and relevant local news, computers were rare and cell phones were unknown.



A fishing boat loaded with Cuban refugees' heads towards Key West in June of 1980.

Time Magazine Article August 2017, Bettmann / Getty Images

By 1986, I had met several of the active BFA Members and was often included in weekend water quality sampling efforts or following illicit discharges – which occurred when industry would often drain their sludge ponds or leave effluent pipes open because the industry knew local oversight didn't work on weekends. Through these efforts and long days, I heard many tales. Those lucky enough to have spent time with the 'elders' likely listened to the same stories that today we recount as oral histories. **Cherish those stories!** And keep them alive by sharing them with future generations.

The generation(s) coming up now are being tasked with cleaning up the messes we didn't know we had a hand in making (circa 1950-60's). Back then, in school we learned 'the solution to pollution is dilution'. Conditions got so bad in the late 1960s, the breaking point might have been when the Cuyahoga River (Ohio) caught on fire (June 1969). Water quality conditions continued to decline, but the river catching on fire was the straw that broke the camel's back and shone a light on the environmental degradation the nation was facing. Richard Nixon was voted into office in 1968 and had inherited the problem. By 1970, in response to the welter of confusing, often ineffective environmental protection laws enacted by states and communities, President Nixon created the USEPA to fix national guidelines and to monitor and enforce them. Fast forward last March (2022) marked the 50-year anniversary of the Clean Water Act, and while today the industry has done a relatively good job of addressing point discharge; We, collectively, as a community (city, county, state) can't get our arms around the insidious problem of stormwater. Stormwater maintenance continues to be a problem, and stormwater management isn't the answer some had hoped and banked it to be.

Interestingly, 2022 marked the 40-year anniversary of addressing stormwater management in NW FL, via stormwater ponds. In 1982, stormwater runoff as a contributor to water quality impairments was realized, and criteria were developed which required new subdivisions to install stormwater ponds to capture and hold stormwater runoff, so it could infiltrate groundwater. Sadly, 40 years after we became aware of stormwater, it continues to be a problem in our area. And all those stormwater ponds are rarely maintained as they were designed and engineered to do.

Rainwater becomes stormwater when it hits a man-made surface (rooftop, driveway, roads, etc.) and runs off these hardened surfaces to a creek or wetland area. Stormwater carries trash (cigarette butts, fast food wrappers, cans, bottles, etc.), road pollutants (oil, metals, petroleum products, etc.), yard chemicals (fertilizers, pesticides, herbicides, etc.), and even roadkill, which can accumulate on surfaces and flow to areas down gradient during rain events.

Stormwater ponds are intended to intercept these man-made pollutants and allow them to degrade, or breakdown either through natural attenuation or nutrient uptake via plants and trees. Stormwater ponds (dry ponds and wet ponds dependent on groundwater levels) have been designed by engineers to have a level of routine maintenance based on the area they serve, the quantity of runoff they accumulate based on average annual rainfall, etc. Stormwater ponds are almost always located in or near wetlands, to take advantage of gravity. Ironically, when stormwater ponds are designed to be built in wetlands (engineers are redesigning Mother Nature's stormwater design) which is flawless. Stormwater engineers will often cut down trees and re-grade the site to be uniform, whereas Nature has designed vertical stormwater systems (trees) and the uneven terrain helps to channel and sequester water.

In April 2014, Escambia County received 28" of rain in 24 hours and caused catastrophic damage to the community. Many stormwater ponds prior to this flood event were designed to capture the first ¼ inch, after this event new subdivisions were required to design stormwater ponds to capture the first 1" of rainwater.

Vegetative buffers between developments and low-lying wetlands or creeks increase the benefits. The wider the buffer, the more opportunity to take up nutrients and increase filtration between upland and waterways. Despite these guidelines, these conveyances can still carry nutrient loading and pollutants to nearby waterways. Ironically, the more subdivisions we build, the more stormwater runoff we create. Cities and counties in the region find themselves in a precarious situation: They welcome the new developments for the jobs and the property taxes they create, but rarely have the resources to maintain the infrastructure.

Another misnomer in the environmental equation is that 'clear water does not necessarily equal clean water'. The region of NW Florida we call home has a rich history dating back several hundred years. This rich history has its roots in the vast resources found throughout the region. The first settlers, the Native Americans, lived with the land and survived off those vast resources. They used what they needed and left the rest. The European colonists viewed the resources as theirs for the taking.

Hindsight demonstrates this line of thinking was incorrect. Today, we know that after the early colonists cut down the forests and straightened the creeks and rivers to float logs to the mills, insurmountable erosion occurred. When the replanting of bare ground occurred, the wrong species was planted. The inferior slash and sand pine were fast growing but did not have the strength or longevity to survive the tropical events the area experienced. The dismantling of the delicate and important diversity among the ecotones, soil types, and the localized conditions helped to unravel the plant realm and root network that created the ecological fabric which supported the vast natural resources and allowed them to flourish.

These last three years 2020-2023, have been an anomaly in every aspect of all our lives. Much like the BP Oil Spill in 2010 emphasized the connectivity and dependency between the environment and the local economy and livelihood

tourism, the Coronavirus, Covid, has highlighted just how inter-connected and vulnerable our communities, regions, nations, and countries really are.

Despite the lapse in face-to-face meetings and newsletters from our organization, the BFA Board has been anything but idle. Here are some of the highlights of our work:

1. We have successfully inventoried and have the amassed **BFA Library** into the public domain through the UF-UWF Centers of Excellence Grant, which in turn supports the new Pensacola and Perdido Bays Estuary Program (PPBEP). Currently the holdings of the collective can be accessed by contacting the Estuary Program at PPBEP.org
2. We partnered with the Satori Foundation (<https://satorifoundation.com/>) applied for and won an '**Impact 100**' **Grant** in November 2021. With this grant, we have purchased a Ford Transit van which will allow us to transport up to 4 individuals and we are currently transforming the rear of the vehicle into a mobile water quality laboratory to analyze samples in the field (thus eliminating issues with holding times). In addition, Satori has purchased a pontoon boat and ten virtual reality (VR) headsets to expand their mission of helping disadvantaged kids learn about area waters through sailing. Together, the BFA and Satori will visit area elementary and middle schools to learn about water quality, recreational opportunities on the water, and how to become good stewards of the natural resources.
3. BFA made the short list for another grant opportunity through the '**id group**' **Giving Back Program** (<https://idgroupbranding.com/giving-back/>) where local non-profits can apply for assistance in enhancing their organizations marketing and outreach. The BFA was established over 50 years ago, and the name of our organization has lost its relevance as we shift further into the 21st century. **Our mission and values remain the cornerstone of our organization**, but the name has become outdated. Unfortunately, we were not selected for the id group project, however we are delighted to have been selected to receive help from **Danielle Pierce**, a graphic designer and photographer (HeyItsDanielle.com). Stay tuned for her magic touch....
4. Our important water quality monitoring program was deemed 'unessential' by the FDEP during Covid, so our last monthly sampling effort occurred in March 2020. We will be resuming the program, complete with a ½ day sampling class as scheduling permits in the next month or so. Stay tuned and please drop us an email if you wish to participate in the water quality sampling class. A sign-up sheet will be available for interested folks at the February 2023 BFA Meeting.
5. The pilot of **Project Oyster Pensacola** (POP) was a huge success, not just for interested waterfront homeowners, but for the many students and citizens who participated in the multi-year monitoring program. Initially designed to last 12 months, we became so engaged and excited about the oyster survival, growth, and recruitment, we kept the project going for 18 months. A complete report of our findings can be found at <http://breamfishermen.org/project-oysters/>. This project generated so much interest, that the newly minted Estuary Program (PPBEP) has reached out to us and asked us to partner with them for another effort. Stay tuned for more information in the coming months.
6. The beloved **BFA Building** in Miraflores Park (17th Ave & Belmont + LaRua Streets) was added to the **National Registrar of Historic Places** in 2021. A big shout out to the **City of Pensacola** (and past Mayor Robinson) and **Mary Gutierrez** (Earth Ethics) for helping our organization get this building protected. For those of you who may not be aware, the building was built in 1934 by the **Civilian Conservation Corps** (CCC) under the **Works Progress Administration** (WPA) program developed by President Franklin Roosevelt during the 1930s Great Recession. The building was originally built as the administration building for the Boy Scouts of America but was abandoned in the early 1960s. Hurricane damage to the roof made the building unusable for years until the BFA Founders asked the city if they were to restore the building (using their own funding), could they then use it as a clubhouse. This was agreeable to the city, and to this day the groups who use the building, besides our group include the Speckled Trout Club, the Fly Fishermen of NW FL, and Project Healing Waters.
There are two items which may be of interest to the membership: **First**, the building is made of brick which were manufactured in north Escambia County from clay collected around **Pine Barren Creek**. The BFA still samples Pine

Barren Creek which is a tributary to the Escambia River. **Second**, during the summer of 2021, a young Eagle Scout took on the project of cleaning out the basement of the building. The rectangular building has four turrets on the corners, which are embedded in the ground and basement. The accessibility to the space within the turrets is through a small opening ~36" wide x ~24" tall, and roughly 6' above the basement floor. During the project, this young man and his colleagues were able to crawl into the turrets to remove stored materials (mainly wood) and came upon human remains. This finding stopped the project, while authorities were brought in to investigate. The human remains were determined to be older than 75 years, though it is unknown at this time exactly how old they are or when the two individuals were buried. Ongoing historic research suggests that Miraflores Park was once used as an African American burial ground that was likely disturbed when the Boy Scout Building was constructed. Please visit www.cityofpensacola.com/Miraflores for more information and to follow the progress of the Miraflores Burial Ground Study.

7. Past Pensacola City Councilwoman **Ann Hill** has been an advocate for opening **Bruce Beach** (in downtown Pensacola) to the public but first she wanted to verify that the waterfront parcel was safe for the public to use for recreational purposes. \$2,500 in discretionary funds provided the BFA the ability to partner with UWF to offer students the opportunity to visit the site weekly and collect water at three different locations along the bay beginning in February 2021. Samplings for bacteria, water chemistry and nutrient analyses were conducted by graduate and undergraduate students in **Dr. Jane Caffrey's lab**. *Enterococcus* (bacteria) samples are being analyzed using USEPA Method (Enterolert (QT)) in a NELAC certified Lab on the UWF Campus by Jeremy Bosso and John Harmuth. *Enterococcus* is a water borne pathogen, which can cause illness and infections when abundant in area waters. In August 2021, a presentation was made to the City Council on the preliminary findings of surface waters in and around Bruce Beach. The findings were dismal as over fifty percent (50%) of the time, samples collected at the three sampling locations were found to be above acceptable threshold levels for human health exposure between Feb 8 and June 24. Monitoring of water quality has shown the waters along Bruce Beach would be unacceptable for recreational activities much of the time. This news coupled with the announcement of the new Blueways Paddling Trail (<https://www.cityofpensacola.com/CivicSend/ViewMessage/message/99459>) compelled the city to fund two further studies with BFA and UWF. Read on for more.
8. The **Blueways Paddling Trail** when completed, will afford paddlers, kayakers, paddleboarders, etc. to access the water from Sanders Beach (city's westernmost coastal property) all the way to Baars Park in upper Bayou Texar (just south of the 12th Ave Bridge). The roughly 10-mile-long trail will afford experienced water enthusiasts to paddle along the coast, past active marinas, and the Port of Pensacola, near the third phase of Project GreenShores (freshly installed across from Admiral Mason Park) and Phases II and I (heading eastward), under the new 3-mile bridge (also under construction) and into Bayou Texar. The City owns roughly 15 properties along this stretch of trail and as such has commissioned the BFA and UWF to conduct weekly sampling along the route for 13 weeks to garner the current condition of area waters. Read the reports and findings at the bottom of the Bruce Beach tab at <http://breamfishermen.org/bruce-beach/>.
9. The entire **Bruce Beach Project** created questions as to the 'source' of bacteria, mainly was it originating from inland sources or was it washing into the Bruce Beach Cove from the east or the west? And were this detected bacteria human, canine, bovine, feline, avian, or others? To address this question, the city authorized the BFA/UWF to sample stormwater inlets and conveyances inland of Bruce Beach to help identify the source of bacteria, and its origins. Coordination between the City Stormwater Engineer and the ECUA Infrastructure Engineer provided some insight as to the issue. As many people know, the City of Pensacola is responsible for stormwater and Pensacola is an old, historic city which has been on the map since the early 1700s. ECUA is the wastewater utility responsible for collecting waste and sending it to the wastewater treatment (WWTP) facility. What many folks might not know is that even though the new WWTP is located north of Nine Mile Road in Escambia County, most of the plumbing

underground is still routed towards the downtown area where the old plant was located and is now being pumped north to the new location, hence the pump house at Government & DeVillers Street (NW corner). As with stormwater conveyances, the sewer conveyances are also aged, brittle, and may be somewhat damaged. This created a conundrum, how was sewage being picked up by stormwater conveyances, and then picked up in surface waters around Bruce Beach?

To carry out the **Bacterial Investigation Project**, the city provided staff to lift stormwater manhole covers so sampling could be accomplished. All in all, 30 sites were sampled throughout 13 weeks, strategically coinciding with rain events (including two tropical events) and periods of drought, to facilitate clues as to the source of the problem. A final report and the findings were presented to the Pensacola Mayor, City Council, and ECUA before the Nov election 2022. This report, and the other two Bruce Beach and Paddling Trail Reports highlight the value of independent water quality sampling. To answer the source of bacteria question, University of Central Florida researcher, **Dr. Melanie Beazley**, who specializes in microbial ecology and bioremediation analyzed samples using qPCR through the **AGU Thriving Earth Exchange** project shepherded by **Dr. Gloria Horning** and concluded that the origin of bacteria was human.

This project provided several undergraduate and graduate students with experience in research, field work and **relevant applied science** which will bolster their resumes. This project also highlights the issues facing the city as it continues to grow and the concerns ECUA has as develops new technologies to address leaking underground infrastructure. Lastly, this project highlights the importance of long-term monitoring which can identify potential problems, so they may be addressed. **No one wants to recreate in polluted or unhealthy waters!**

10. **Bruce Beach** is currently being transformed from a 10-acre waterfront parcel of land hidden between the Maritime Park (east) and Joe Patties Fish House (west) to an amenity park with paths, a kayak launch, and a pedestrian bridge across Washerwoman Creek. Fingers crossed they include a restroom in Phase 1. What the public may not know is that a handful of citizens representing **Audubon** (Steve Costner), the **Native Plant Society** (Duane Tant), **Ocean Hour** (Barbara & Sharon) and the **BFA** have been active in keeping this park native, that is **planting native 'flora' species for native 'fauna' species**. Over the years, students from **Trinitas School**, the **Dixon School of Arts and Sciences**, and **UF** and **UWF** have planted plants, monitored waters, and quietly behind the scenes, citizens have watered plants during droughts, maintained planted beds, collected tons of trash, and mowed paths through briars to make access available and safe. Thank you to these Community Members – for your role in preserving this area for future generations!

11. The **RESTORE Project to Revitalize Carpenter Creek and Bayou Texar** has been underway for several years and is comprised of a lengthy process. Late in 2019, the Wood Team (Environmental consultants who were awarded the Escambia County Restore Project) provided an excellent overview to the Estuary Program Technical Committee, to update the group on the progress they made since being awarded the contract to develop the Master Plan for the Watershed. The system from the three headwater creeks to their confluence south of I-10 and west of I-110 to the upper portion of Bayou Texar (12th Ave Bridge) is roughly five miles in length and from there the bayou extends another 5 miles south to the mouth of Pensacola Bay. Carpenter Creek runs through the heart of the community and feeds into Bayou Texar, one of the three urban bayous in Pensacola. Roughly 2/3 of the lower creek and the entire bayou are located within city limits.

Despite being fragmented numerous times by roads and constricted by multiple culverts and bridges, there are some small portions of the overall ecosystem that are doing well. Unfortunately, a large portion of the creek (west of I-110 to 12th Ave) is in trouble. The root of the problems includes encroachment and development near the creek, loss of habitat (mainly the riparian zone and the flood plain connection) and the direct stormwater runoff which carries nutrients, sediments, fecal coliforms (see the Paddling Trail Report), and trash (lots and lots of trash).

12. Newly elected 2022 City Councilman Charles Bare didn't waste any time in donating \$500 to the BFA for additional water quality monitoring. Thank you to Councilman Bare, to the City's Transition Team Members, and the past and present elected officials for caring about our natural resources enough to want to protect them and have them routinely monitored.

13. Living along the coast, many of us may not realize that our rivers and creeks which discharge into the bays (Perdido and Pensacola Bays) have their beginnings, the headwaters, tens and even hundreds of miles inland. The BFA, in partnership with UWF, just completed a sampling event in the upper watersheds to address data gaps for the new Estuary Program. The project entailed visiting 24 stations, 8 in AL portion of the Perdido Watershed, 11 stations in the Escambia/Conecuh Watershed, and 5 stations in the Yellow/Shoal Watershed. The report is almost complete, and we hope to be able to share some of our findings during this meeting.

14. Besides the upper watersheds, very little had been done to look at the wetland systems near the mouths of our main riverine systems since the EMAP (Environmental Monitoring and Assessment Program) which is sponsored by USEPA. In an effort to help stand up the new Estuary Program, the UF was commissioned to visit 30 stations in the Perdido, Escambia, Blackwater, Yellow, and Garcon Point wetland systems to collect data on plant types, diversity, and abundance, soils, water quality, and overall condition. We will be showing some slides from this sampling effort.

Apropos monitoring, are you Interested in water quality and natural resources, but not sampling in the field? Would you like to know more about applied science? The BFA has board positions available, as well as education and outreach opportunities for interested community members. Join us at our quarterly meeting to learn more.

The [Bream Fishermen Association](#) is a not-for-profit organization dedicated to promoting environmental conservation and recreational opportunities for anglers, hunters, campers, and people invested in related outdoor 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) Provide environmental education and outreach.

The vision for the Bream Fishermen Association 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. The BFA has a long legacy of assisting county, state, and federal partners in area-wide water quality monitoring. Through these monthly efforts, citizens have become aware and engaged in their area's waters and are becoming better stewards for the environment.

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 1203 North 16th Ave, Pensacola, 32503.