



The BFA April 2017 NEWSLETTER

Please mark your calendar for the next General Membership Meeting

Wednesday, 3 May 2017

NOW HEAR THIS: This is NOT an Eating Meeting...but we will serve hor d'oeuvres
NEW LOCATION: We will be meeting at **Duh!**
Located at 501 N 9th Ave, Pensacola, FL 32501
(Corner of 9th Ave and East Wright Street)
TIME: Come mingle with us at **5:30; Book reading begins at 6:00**
Come earlier and stroll through the lovely furniture and Garden Shop

Please join us in welcoming Jack E. Davis, author of *The Gulf: the Making of an American Sea*, a comprehensive history of the Gulf of Mexico from the Pleistocene to the present. *The Gulf* offers a sweeping history of "America's sea" from the age of conquistadors to the present day. Jack describes how the Gulf's fruitful ecosystems and exceptional beauty inspired and empowered the people of a growing nation. Filled with vivid, untold stories from the sport fish that launched Gulf-side vacationing to Hollywood's role in the country's first offshore oil wells, *The Gulf* shows how human activities anticipated Hurricane Katrina, the Deepwater Horizon disaster, and the pernicious effects of sea-level rise.

Having grown up in the Ft. Walton Beach area, Jack spent his summers playing in Santa Rosa Sound and the Gulf. In 2013-14, he traveled along the Gulf Coast conducting research for this book. Along the way he even attended a BFA Meeting. Davis is a professor of history and sustainability studies at the University of Florida. His 2009 book, *An Everglades Providence: Marjory Stoneman Douglas and the American Environmental Century*, received the gold medal in the nonfiction category of the Florida Book Awards.

<http://www.tampabay.com/features/books/review-jack-e-davis-the-gulf-an-enthralling-history/2315014>

Seven years ago this month, the Gulf of Mexico experienced a severe environmental impact when the British Petroleum (BP) Deepwater Horizon oil rig exploded and created the largest offshore oil disaster in history. Millions of barrels of oil leaked into the Gulf of Mexico. Eleven men perished during this preventable accident, leaving their families far from whole.

Since 2010, more than 1,400 dolphins have been found dead along the Northern Gulf of Mexico, marking the longest "unusual mortality event" recorded in the area, according to NOAA. Credible estimates of the loss of up to 1 million birds also tell the story. But more mysterious and just as worrying is what scientists have a much harder time measuring, like the impacts on deepwater corals, zooplankton and many types of marine life that live in the middle depths of the sea, explains Environmental Defense Fund Chief Oceans Scientist Douglas N. Rader.

"To top it off, all of this occurred near the Mississippi River Delta, an ecosystem already under enormous pressure," Rader says. *This pressure is driven by century-old development choices that favored commerce and development over sustainability of the Delta.* And now research has shown that the rate of marsh shoreline erosion has increased with oiling. (www.edf.org)

While our Florida beaches experienced some oiling, it was minimal compared to what Mississippi and Louisiana shorelines experienced. And while NW Floridians are well seasoned in knowing what to do and how to prepare when hurricanes make their way into the Gulf, very few Floridians had any experience with oil and dispersants mixed into our beautiful Gulf waters.

The BP oil rig was certainly the source of the problem, and what made it so alarming was that for the first time in our history the public was able to see oil gushing from the depths (real time) for 87 days thanks to the technology that developed Remote Operating Vehicles (ROVs) with live camera feed to satellites which transmitted images and information into our homes. This feat was both amazing and alarming rolled into one.

This visual evidence was an important tool in implicating BP and its partners as responsible for this disaster. Litigation commenced almost immediately after the explosion and oil spill. By 2013, the US Justice Department announced, "Transocean Deepwater Inc. has agreed to plead guilty to violating the Clean Water Act and to pay a total of \$1.4 billion in civil and criminal fines and penalties." Of that total, \$800 million went to the Gulf Coast restoration Trust Fund, \$300 million to the Oil Spill Liability Trust Fund, \$150 million to the National Fish and Wildlife Foundation and \$150 million to the National Academy of Sciences. MOEX Offshore 2007 agreed to pay \$45 million to the Oil Spill Liability Trust Fund, \$25 million to five Gulf states and \$20 million to supplemental environmental projects.

In September 2014, US District Judge Carl Barbier ruled in the Clean Water Act trial that BP was guilty of gross negligence and willful misconduct under the Act. He described BP's actions as "reckless," while he said Transocean's and Halliburton's actions were "negligent." He apportioned 67% of the blame for the spill to BP, 30% to Transocean, and 3% to Halliburton. (www.en.Wikipedia.org)

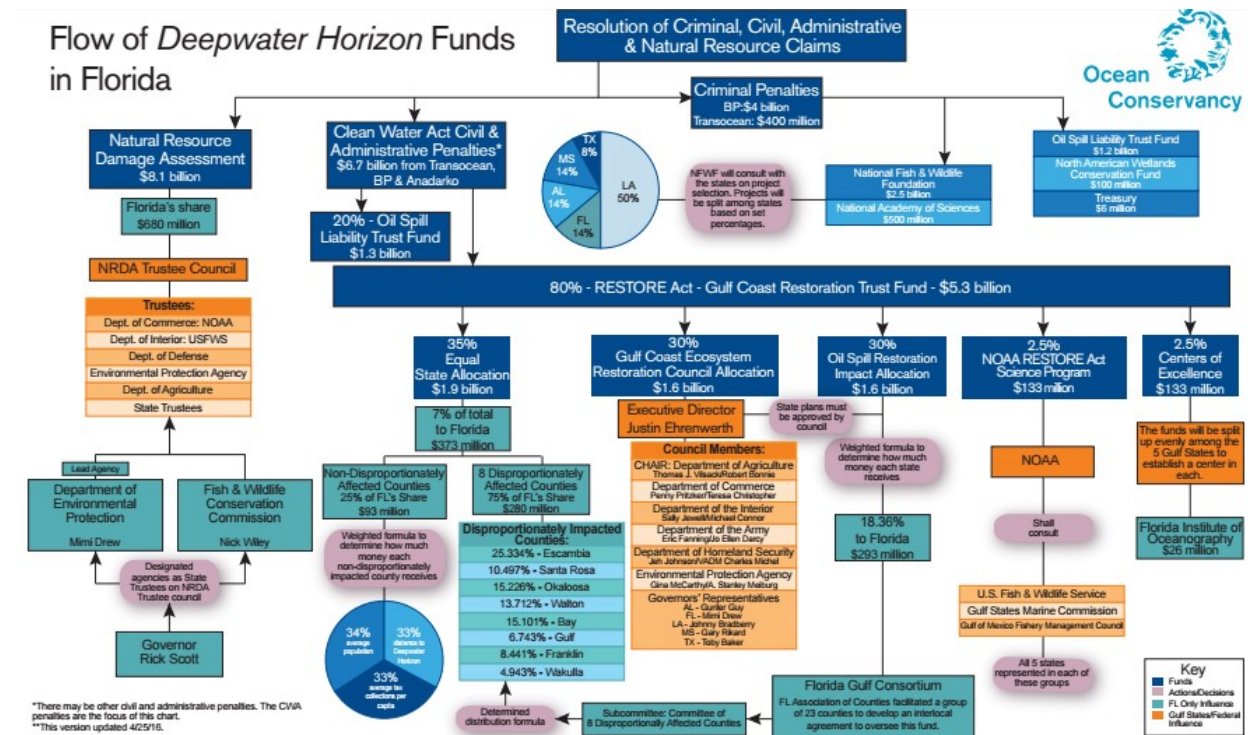
By the time it is all said and done, BP will have paid out \$7.8 billion to settle roughly 100,000 claims filed by individuals and businesses affected by the spill another unprecedented \$20.8 billion settlement between the U.S. government and BP was finalized in April 2016.

Through a complex set of formulas, portions of this money are being filtered down to the Gulf states and counties which were impacted directly by this incident to mend and repair our communities and environment. The Ocean Conservancy tackled the formula for each state (because of course each state had different rules and needs) and created an amazing graphic which helps to visualize how monies will be distributed across counties and time.

The process for each county to access this Restore money is long and convoluted. This is in part because this is a new process for the counties, and there is opportunity for public participation and review at each step. Remember the lengthy process of appointing citizens to the Restore Act Committee and holding public monthly meetings for several years? That was part of the process. So, where are we today? The counties which have access to the money (and with that responsibility come strict oversight to the US Treasury) are developing a system by which they will uphold the intent of the law, known as the Restore Act.

Many areas along the coast received new boat launches. In Escambia County, FL they include: Big Lagoon, Galvez, Mahogany Mill, Navy Point and Perdido River at Hwy 90. In addition to boat launches, a number of important projects have been funded and are in various stages of the development process (design, permitting, etc.). They can be found at Escambia County's newly designed website. (<https://myescambia.com/our-services/natural-resources-management/restore/projects>)

Santa Rosa County currently lists 15 projects submitted to the US Treasury for final review; at the time of this writing monies have not been released yet. <http://www.santarosa.fl.gov/governing-src/index.cfm?Menu=51>



Projects submitted to the counties for Restore funds have been vetted by the Restore Committee and county staff, and once voted on by the Board of County Commissioners (in each county) will be forwarded to the US Treasury for final blessing. And only then will projects be funded. If we use the crawl, walk, run analogy – we are still learning to walk and appear quite wobbly to the observer.

At the same time the 8 counties along the coast are finalizing their projects, several state agencies are in the midst of compiling and updating various management plans. The Northwest Florida Water Management District (NFWFMD) is currently in the process of updating the Surface Water Improvement and Management Program – otherwise known as the SWIM Plan(s). The purpose of these plans are to outline and address issues specific to each watershed in the Panhandle and ideally identify potential mitigation options to improve and protect water quality in our creeks, rivers, bayous and bays. The SWIM Plans were Florida's earliest attempt to manage waterbodies using an integrated approach; this approach was adopted in 1987 when the Florida Legislature passed the Surface Water Improvement Act. <http://www.nfwfwater.com/Water-Resources/SWIM/SWIM-Plan-Updates>

As our region continues to develop and grow, the accompanying land use changes could contribute to additional stormwater runoff, sedimentation and nutrients as well as continued habitat fragmentation which then negatively impact our waters. These SWIM Plans are intended to be a guiding light to avoid many of the past mistakes and issues that the state, county and environmental community are attempting to correct from past activities.

*We didn't know then what we know now, But now that we know what we know,
We should avoid making the same mistakes again.*

Economic growth in Florida, and elsewhere, depends on water; good water quality is a large component in that equation. Water quality and air quality are not political; for our communities to thrive it behooves us to take care of these critical resources. Coastal Resilience is another important aspect of our area and terrain since we are so closely connected to and surrounded by water bodies. As we continue to grow our communities, we must make sure that our communities apply Smart Growth concepts in which we cluster development in upland areas (away from low, lying, flood prone or riparian zones).

Smart Growth is an urban planning and transportation theory that concentrates growth in compact, walkable urban centers to avoid sprawl. Sprawl negatively impacts water quality. Habitat Conservation and Restoration work hand-in-hand with Smart Growth concepts – such that new development avoids fragmenting these ecosystems. Wildlife and fisheries are enhanced when Smart Growth is a driver in development. Wildlife and fisheries are enhanced when vegetative buffers are maintained between upland systems and waterfront. Living Shorelines are encouraged at the land/water interface in lieu of bulkheads, hardening or rocks. An added benefit to Living Shorelines is the ability to trap sediments before they enter the water, take up nutrients, attenuate wave action, provide habitat for many organisms and their ability to self heal. That's right; plants can grow back and fill in areas – that is, self healing.

The Bream Fishermen partnered with the Francis M. Weston Audubon Society, The Friends of Perdido Bay, the Longleaf Pine Chapter of the Native Plant Society, and the Panhandle Watershed Alliance to provide input from several citizen science organizations on the Perdido SWIM Plan, and the Pensacola Bay System SWIM Plan. These organizations are on the ground, in our communities, sampling, counting

or identifying flora and fauna in this region. They know where the shorebirds are nesting; the red clay run off is coming from; the small pocket of native ground orchids was discovered; and the explosion of invasive species after a restoration project is “completed”. Often citizen organizations do not have the opportunity to contribute to these management plans partly because they are designed around government work hours and in part because as governmental agencies provide input, these same agencies can apply for funding to address their suggested projects.

These SWIM Plans for each watershed were intended to be updated in 10-year intervals, in the case of the Pensacola Bay System; the plan has not been updated since 1997. One reason for this (there are several) is that the NFWFMD is funded by a percentage of the property taxes in the 16 counties it oversees, a millage rate. Of the five WMDs in the state of Florida, the NW District receives the smallest millage rate. This might have been a great solution when most of our landscape was in timber and agriculture, but today this is a big problem. The original intent and job for the WMD was to restore and protect surface waters in their districts by land acquisition, by water monitoring, by permitting stormwater and wetlands, and by use of Capital Improvement Funds for erosion projects. Our NW District cannot accomplish these goals or any level of oversight given the lack of budget, so different counties and cities have stepped in to assist. In doing so, they do not have the regional perspective and often do not have the expertise to conduct quality work, which ends up costing the community in the long run. For more on this topic and insight to the issues, please visit the NFWFMD website and read the comments submitted and approved by the collective citizen groups mentioned. The SWIM Plan comments for each watershed can be found on the BFA website.

Growth continues to be the central economic driver in our coastal areas, which is why the SWIM Plans fill such an important role to these communities. While there is much unrest in Washington, DC, and state capitals – about cutting out the US EPA, relaxing water quality criteria, removing first order creeks from water quality monitoring programs, and looking the other way when developing too close to a water body – the alternative is frightening, namely self-policing. Accountability via checks and balances are critical whether it is advancing to the next grade in school, making sure a procedure is done correctly (as in hip replacement surgery), investing wisely in the stock market with an eye on the bottom line, or a stream restoration project that improves water quality and increases habitat. Without checks and balances we would be relying on everyone, every community, and every industry to do the right thing – follow the rules – at all times. While it would be nice to think that we have that level of ethics and integrity, not many people, communities and companies do.

Which brings us to the importance of Water Quality monitoring; as most of you know, the BFA has been sampling water quality at set stations in NW FL and South Alabama for 50 years. This valuable record of conditions can be used to review the trends over time – as land use has changed – and allows us to forecast what could happen to healthy creeks if adequate buffers are not considered as development occurs. Monitoring is also an excellent gauge to see if stormwater improvements – which are often costly - are working correctly. Like it or not, monitoring, assessments, and management go hand-in-hand to gauge coastal ecological conditions and to determine their overall effectiveness. Research is another key component in this equation.

Much like the technology and research that went into developing the ROV that broadcast live video of the oil spill from one mile beneath the surface of the Gulf of Mexico from April thru July 2010, research continues to develop and apply new technology to a host of techniques and methods we benefit from daily. Take the new medical minimally invasive surgery using the DaVinci Robot to conduct cardiac,

thoracic, or urologic surgery which does not open the patient and require a lengthy and painful rehab. In our area, the Institute for Human & Machine Cognition is working with oceanographic groups to develop a vessel operated by remote control which can conduct bathymetric surveys, collect water quality, and film conditions in the water column all in the timeframe of a day. Data can be collected, analyzed and interpreted in rapid time sequences. This information can then be used to determine the ecological condition of the entire system and assist in pin-pointing sources of degradation in water chemistry or sedimentation in the water basin. Having this information can assist in management decisions and focus efforts on areas where the return on investment will pay off sooner rather than later.



These technological strides can only occur through continued research when it is based on monitoring, assessment and management. <https://www.csaocean.com/blog/usv-survey-in-pensacola-fl>

We all love our area and our waterways. Whether you are a fisherman, a kayaker, paddle boarder, surfer, swimmer, diver or boater – several things are certain; we want our waters to be pollution free; we want our natural resources to be healthy; and we want to be sure that the fish, crab, shrimp, or oysters we harvest are not accumulating heavy metals, high levels of bacteria, or any other chemicals which can cause illness to people, the birds or any of the wildlife that makes a living in our region.

Our beautiful Sunshine State has incurred some bad impacts from impaired water quality. The Indian River Lagoon along the state's East Coast, also called the Space Coast, experienced record fish kills and algal blooms after nutrient-rich waters were released into the river. Researchers throughout the state began observing the signs that something terrible was close to happening. The seagrass beds were starting to die off, healthy algae was being replaced by unhealthy species and then those species bloomed into green pea soup when nutrient-rich waters were diverted into the system. As the algae die-off began it depleted the oxygen in the water column causing a cascade to begin. Our health as individuals, as a community, is based on healthy water quality. Real estate values in St Lucie, Indian River and Brevard counties dropped 30-40% as a result of this environmental impact.

The UWF HAAS Center conducted an Economic Analysis of the Contribution of Choctawhatchee Bay to Okaloosa and Walton Counties in 2006. At that time, the research department for VISIT FLORIDA, the state's tourism marketing office, reports that tourism is Florida's number one industry – generating \$57 billion in total tourism-related taxable sales for the state's economy in 2004. In 2004, some 79.8 million tourists visited Florida, and direct spending generated by these tourists supports 912,700 jobs statewide.

Today, our state has over 20M residents and receives over 100M human visitors. Our state also supports year round and migrating birds, fish, wildlife and a host of plants unique to our region. One percent of the \$57B generated by tourism reinvested into our states' environmental management and restoration would provide an incredible return on investment. In Nov 2014, citizens voted to protect sensitive lands and water quality. To date, that money has not been allocated to the intended use. Instead of abolishing the US EPA and relaxing environmental criteria, rules and laws, we should be strengthening protection of these sensitive lands – because once they are gone, it's very expensive and difficult to get them back in a healthy, productive balanced system.

Apropos restoring impaired systems, the Carpenter Creek-Bayou Texar restoration project submitted to Escambia County has been getting a lot of attention from both the local Coastkeeper and Pensacola City Councilwoman Sherri Myers. To date, they have organized several town hall meetings and creek clean-ups – with more planned in the future. In addition, Escambia County Commissioner Grover Robinson stepped up and used county monies to purchase a lovely parcel of land near the headwaters (and one of the BFA Water Quality Sampling Stations) of the creek on Olive Road. This purchase will insure this parcel and the beautiful live oaks living there will be kept in a natural state. The BFA couldn't be more delighted since we have been sampling this creek and bayou at five stations for 50 years. To see the full proposal on a community-based approach to watershed restoration, which was submitted to the county Restore Program, please visit the BFA website.

Emerald Coastkeeper has entered a contest that can win up to \$100,000.00 for creek restoration! Please vote at the following link <http://act.usatoday.com/submit-an-idea/#/gallery/60470982>

Speaking of protecting our waters, Jacqueline (Jackie) Lane has published *Perdido Bay Blues, the Struggle to Save Perdido Bay*, which can be purchased on Amazon. Anyone with ties to this area will be pulled into the saga Jackie, her late husband Jim, and many citizens living in our area have endured for decades while trying to save this water body. The Perdido River is considered an Outstanding FL Water by the FL Dept of Environmental Protection (<http://www.dep.state.fl.us/water/wqssp/ofwfs.htm>) and yet Perdido Bay is considered dead. Jackie's book is a 30-year case study which provides a historical account of the long-term effort to rescue the bay from the ravages of the one industry which discharges into the bay, namely International Paper. It is a powerful read, and will leave the reader wondering just how the environmental policies of both state and federal governments who are supposed to be protecting the environment, preferred jobs over the environment. The book details how powerful economic interests skew environmental decisions and attempt to cover up environmental damage. The cover up includes slanted science, fake toxic algal blooms, lost data and other malfeasance.

Unfortunately, this story provides the reader with insight into how environmental regulations work or rather does not work. I'd like to think it doesn't happen anymore in this day and age, but just ask the residents of Indian Bayou or Dogwood Creek, and you'll see it still happens in 2017. Jackie's

organization, The Friends of Perdido Bay, is a sister organization to the BFA. Information can be found at <http://www.friendsofperdidobay.com/>

The Bream Fishermen Association is a not-for-profit organization dedicated to the promotion of the conservation responsibilities as well as the recreational enjoyment of fishermen, hunters, campers and related outdoorsmen.

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; and
- 3) Advance the causes of plant, marine, and wildlife preservation.

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) and \$10 annual dues to our mailing address.

Be sure to notify us if you prefer to receive notices and announcements by mail or email.

Bream Fishermen Association

1203 N. 16th Ave, Pensacola, FL 32503
