# Texas Coastal Holiday Newsletter From Jim Blackburn December 2022

Hello and happy holidays. Once again, I am sending out my coastal holiday newsletter to share my views on the state of the Texas coast and to wish you all happy holidays in a Texas coastal way. This newsletter started off as a report to the public about the results of several settlement agreements reached with Formosa Plastics back in the 1990s — settlements that helped address many of the issues concerning toxic pollutants that had arisen about the operation and expansion of their facility in Point Comfort. When those settlements expired, I continued to report on Formosa and began writing more generally about issues along the coast which I encountered through my coastal environmental law practice.

These days, I am no longer litigating environmental issues, but I am still very much involved in the Texas coast. Most of my work these days is as the President and Chief Executive Officer of <u>BCarbon</u>, a non-profit that issues carbon credits suitable for commercial use by companies interested in lowering their carbon footprint. I am active in several other non-profits such as the <u>Matagorda Bay</u> <u>Foundation</u>, the <u>Texas Coastal Exchange</u>, and The Aransas Project. I also still teach sustainable design in the Civil and Environmental Engineering Department at Rice where I am co-director of the Severe Storm (SSPEED) Center as well as a faculty scholar at the Baker Institute. It is from these perspectives that I offer this year's overview of the Texas Coast.

### 1. The Texas Coast is Changing

Looking back, I think the Texas coast has changed and is changing in some fundamental ways from the 1970s and 1980s when I was first getting to know it. Now, make no mistake, it still looks the same. We are still this funky hybrid of heavy industry, barges, fishing boats and fishing, cattle, and birds, but the behindthe-scenes dynamics and the socio-economic make-up are definitely changing.

50 years ago, industry and their leaders were secure and arrogant - in control - and it doesn't seem quite that way to me these days. Industry today seems to be

more open to hearing new ideas and new approaches than I remember. This does not mean they are not powerful, for they still are. But they are a different petrochemical complex today as we move further into the 21<sup>st</sup> century than they were in the past. More on this later in this newsletter.

Another major change is the continuing decline of commercial fishing. While many recreational fishermen may cheer the demise of the commercial fishing industry, I do not. In the 1980s and 1990s, the commercial fishing industry could be depended upon to fight for environmental quality on the coast. They would oppose bad wastewater and hazardous waste permits that others were hesitant to oppose for political reasons. They were an important voice, and they offered an unmistakable presence on the coast. They were not always politically or socially astute, but they could be counted on to stand up and fight for the resources of the coast.

White rubber boots at beer joints on and near the intracoastal waterway once made quite a statement. I still remember a hearing that the Corps of Engineers held in Sargent off East Matagorda Bay at a local bar/marina on the intracoastal waterway where the owner, seeing a major opportunity, started serving beer a couple of hours before the meeting started – a meeting asked for by my commercial fishermen and women clients who were tired of dredged material being dumped on their oyster reefs and bay access channels. That meeting concluded with me helping the Corps depart rather briskly through the back door. I'm sure the Corps has not held a public hearing in a local bar since then.

Today, commercial fishing for reds and trout is long gone, bay shrimping is greatly reduced, fish houses are closing down, and the issues around oysters are boiling hot. Texas Parks and Wildlife is wrestling with incredibly difficult issues surrounding public oyster reefs being destroyed by commercial oyster boats at the same time that many oyster fisherman can barely make a living.

Life has never been easy on the Texas coast, but it can certainly be wonderful. And there are things in motion today that while they won't solve all problems will help generate a brighter future. I lament the loss of the advocacy voice of commercial fishing, but I also envision many positives going forward in other spheres. So, I hope you enjoy this version of the newsletter including the poems at the end.

# 2. Carbon, the Texas Coastal Prairie, and Resilience

Some years back I wrote a book titled *A Texan Plan for the Texas Coast*. In this book, I wrote about the risk that severe storms pose to the Texas coast. Much of this book was based upon research conducted at the Severe Storm Prediction, Education, and Evacuation from Disaster (SSPEED) Center at Rice University under funding from the Houston Endowment. In this work, we recognized that much of the Texas coast was at high risk of inundation by storm surge. The high-risk surge zone of the Texas coast is shown in Figure 1.



Figure 1. Map of coastal Texas depicting about 6 million acres that are high-risk for hurricane surge inundation. The surge risk is highest in the upper coast with the larger continental shelf and lower on the southern coast. Graphic by Christina Walsh for *A Texan Plan for the Texas Coast*.

One clear conclusion from our research was that Texas was highly unlikely to restrict development of these high-risk areas through regulation. It's just not in our Texas DNA to regulate, regardless of how reasonable such regulation might be. In that book, I wrote of the potential to achieve through money what could not be achieved by regulation, and one monetary pathway was to pay landowners for carbon credits.

At that time, even though a voluntary international carbon market existed, it simply did not work for Texas landowners. To address this deficiency, I took these ideas to the Baker Institute at Rice, and we developed a stakeholder group dedicated to trying to understand and improve the voluntary carbon market. We initially developed a concept and took it to some of the established carbon credit registries who said they were not interested in a new, novel concept such as the one we had created within the stakeholder group. So, on the advice of the stakeholder group, we formed BCarbon, a 501(c)(3) non-profit organization. BCarbon is now issuing voluntary soil and forest credits and is finalizing a protocol for coastal blue carbon credits.

The basis now exists to develop a carbon credit program associated with the prairie grasslands and floodplain forests of the Texas coast. Such a comprehensive program does not exist yet, but pieces are beginning to take shape. It is not unreasonable to anticipate that by 2030, over 1 million acres of Texas coastal prairie will be enrolled in a coastal soil or forest carbon credit program. And that does not include the wetlands that also will be involved in coastal blue carbon credit concepts which are discussed in the next section.

The point is that the protection of the Texas coast with private capital is beginning to happen. Most companies in Texas and elsewhere have committed to be carbon neutral by 2050 and promised to halve their carbon emission footprint by 2030. Projections that I have reviewed and agree with indicate that of the 6 billion tons of carbon emissions in the U.S., a 50% reduction by 2030 would represent about 3 billion tons. As shown in figure 2, current policies/commitments will generate a 24% to 35% reduction and the new incentives for carbon capture in the Inflation Reduction Act will add another 31% to 44% reduction. When you combine these figures, the projections indicate that a shortfall of from 21% to 45% will exist in 2030, indicating that nature-based solutions or direct air capture technology will be relied upon to cover the remaining 600 million to 1.4 billion tons, and nature is much cheaper and easier to scale.



Figure 2. Image by Rhodium Group (with circle added) depicting the carbon reductions of 6.5 billion tons of emissions in 2005 to 2030 based on current policy reductions and the incremental reduction added by the technological removal subsidies of the Inflation Reduction Act, leaving a gap (shown in the circle) of from 600 million to 1.4 billion tons that might be filled with nature-based carbon credits.

The pathway to the realization of this latent market is not yet clear. By 2030, there will be a demand for carbon credits from 600 million to 1.4 billion tons. What is unclear is when that market will begin to be realized. Buyers hopefully will see that if they want nature-based credits to be available in 2030, they need to start developing the infrastructure to support their upcoming needs today. As shown in Figure 3, a straight-line realization of that demand would steadily increase from the approximate 50 million tons per year of nature-based credits that are being transacted today. It makes a huge difference if this demand becomes latent and is only realized as we get closer to 2030 as is also shown in Figure 3 with the dotted lines.





If the infrastructure to provide these credits — the project developers, the testing expertise, the credit registries, the landowner contracts — is not developed carefully over time, there will be a huge bottleneck when demand hits. In that situation, it is likely that only those companies with established buying relationships will be able to make these purchases which will be by far the cheapest alternative for reaching carbon neutral goals.

The development of the market for nature-based soil and forest carbon credits will make a huge difference to the future of the coast. Soil carbon sequestration rates on the Texas coast are likely in the 1 ton per acre per year range when practices are introduced to avoid overgrazing and can be increased to 2 tons per acre and more with the introduction of regenerative grazing and prairie restoration. As the critical deadline of 2030 approaches, the expectation is that

carbon prices will rise with demand. In discussions with buyers, it is clear that buyers prefer credits based on scientific testing for actual carbon dioxide drawdown from the atmosphere. These are the types of credits that BCarbon and other registries will be offering on the Texas coast. And they will help to preserve the future of ranching and ranches along the Texas coast.

### 3. Protecting the Wetlands of the Texas Coast with Carbon Credits

Not much has been written about the long-term effects of sea level rise on the Texas coast relative to our coastal wetlands, yet I would argue that this is one of the largest, most important long-term threats to the future of the Texas coast. Our coastal wetlands are an essential element of our coastal fisheries. They are the nursery for white and brown shrimp, blue crab, and flounder as well as any number of smaller fish species. The value of the ecological services that they provide has been estimated at over \$25,000 per acre per year by David Batker, a widely respected environmental economist who is based in Seattle, WA.

Over the next several decades, rising sea level will likely drown our wetlands, killing the vegetation and making the marsh itself susceptible to massive erosion that will remove these important elements of the Texas coastal ecosystem. The risk to coastal wetlands is shown in Figure 4 where the current coastal wetland acreage is shown relative to the projected sea level rise from the Sea Level Affecting Marshes (SLAMM) model.



Figure 4. Map of the Texas coast showing the wetlands affected by sea level rise in dark green as per the SLAMM model along with the remaining wetlands not expected to be inundated initially. Image from Spatial Analytics and Research Consulting (SPAARC) for BCarbon.

In April 2022 with financial support from the Meadows Foundation and John Teutsch (also of Seattle, WA), the Texas Coastal Exchange (TCX) proposed a plan to protect the Spartina alterniflora wetlands of the Texas coast by proposing a 1000-mile living shoreline project that could be financed by the issuance of carbon credits. This concept was adopted up by BCarbon which utilized funding provided by Valero Energy Foundation to study whether and how these living breakwaters could protect our wetlands and the carbon stored beneath them. The basic concept is that constructed breakwaters could protect the marsh from being eroded away and carbon credits could be issued for preventing the carbon stored in the wetlands from being released. Once these wetlands were protected, then the yearly increase in carbon sequestration within the marsh would become eligible for carbon credit issuance because the marsh was now protected. Additionally, the Palacios Marine Agricultural Research (PMAR) group will provide spat from their oyster hatchery to enhance the probability of oyster growth. This growth may also provide a basis for carbon credits along with any sequestration provided by colonizing sea grass which we expect to see in some parts of the coast.

And then to complete this picture, an investor group contacted us and expressed their interest in building the initial 250 miles of this coastal breakwater, pledging up to \$500 million to complete this work. Now that is pretty neat — private money has been committed to breakwater construction on the Texas coast, starting in 2023, to implement the first comprehensive concept for coastal wetland protection from sea level rise in Texas, and perhaps in the United States if not the world. This is indeed a Texas-scale concept, one that we all can and should be proud.

As can be seen in Figure 5, the basic concept is that the entity that constructs the breakwater would receive carbon credits for protecting the marsh from erosion that would release, over time, the carbon stored in the marsh soil.



Figure 5. Conceptual diagram of the carbon credit issuance process under the BCarbon proposed blue carbon protocol. Image by Lalise Mason for BCarbon.

NASA prepared a comprehensive data base for coastal marshland soil carbon content and data exists for sites up and down the coast. As can be seen in Figure 6, the amount of carbon stored in the various marshes of the Texas coast varies greatly, generally declining as one moves from the Sabine toward the Rio Grande. As a general proposition, this variation follows the amount of sediment coming down the various river systems, with those with higher flows such as the Sabine, the Neches, the Trinity, and the Brazos generating more carbon than those with lower flows.



Figure 6. Map showing generalized soil carbon credit values for the Texas Coast. Data compiled by Dr. Rusty Feagin, Texas A&M, for BCarbon.

Over the long term, not only will these breakwaters need to be maintained but the sediment loading into the marshes will need to be monitored and augmented. By design, these breakwaters are intended to capture all available sediment, and those sediment-rich bays and estuaries will offer more sediment to harvest than will those with lesser inflows. In the future, however, we will need to focus attention on the use of maintenance dredging material to assist the marsh's response to sea level rise. It is hoped that we can develop broadcasting systems to spread sediment over thousands of acres proximate to areas such as the Gulf Intracoastal Waterway that will need periodic maintenance dredging. It is interesting to consider that something that we once called "dredge spoil" and that was the subject of protests in the past may become one of the most important resources to the future of Texas coastal wetlands.

So the next time you fish the coast and find some trout beneath the birds that are chowing down on the shrimp jumping out of the water or when you find a school of redfish cruising the marsh edge, foraging on the shrimp and finger mullet coming out of the marsh grass with the outgoing tide — marshes where they have been seeking refuge — you might whisper a thank you to the investors and BCarbon who are working to protect this resource.

#### 4. Update on Formosa Plastics

As you know from last year's newsletter, Formosa Plastics lost a major lawsuit brought by Diane Wilson's organization the San Antonio Bay Estuarine Waterkeeper alleging violation of the wastewater discharge permit because of the inclusion of plastic pellets, flakes, and powder in the wastewater (<u>San Antonio</u> <u>Bay Estuarine Waterkeeper v. Formosa Plastics Corp., No. 6:17-CV-0047, 2019 U.S.</u> <u>Dist. LEXIS 108082, at \*6-7 (S.D. Tex. June 27, 2019)</u>). This is a powerful federal court decision, and I don't think the full extent of this ruling has been felt or fully understood.

In this case, the court effectively found that any amount of visible plastic (whether pellets or smaller) and microplastics in the wastewater discharge would be more than a trace amount if they were visible. Such visible plastics were found in the wastewater at Formosa, and it is likely that all plastic plants that directly discharge into a bay or waterway may be in violation of the court's finding of what constitutes an exceedance of "trace amounts" language in their NPDES permit. To date, enforcement of this provision has not been consistently pursued by either the Texas Commission on Environmental Quality (TCEQ) or the U.S. Environmental Protection Agency (EPA).

To comply with this court decision, Formosa has made and continues to make major changes to their process water and stormwater management systems. Although the new process design utilizes sophisticated ultra-filtration, this wastewater may still contain microplastics that could trigger a violation. Based on their strategy, Formosa is evaluating, studying, and advancing systems to attain zero discharge of process wastewater to Lavaca Bay. Assuming that to be true, this is a huge new development and the culmination of a goal set by Diane back in the late 1980s when we were first litigating against Formosa. In fact, the ultimate solution may come from work done under one of the early settlement agreements dating back to the 1990s, a wastewater study agreement where we first evaluated reaching zero discharge.

In order to bring the stormwater system into compliance, Formosa has redesigned and is in the process of constructing a new internal drainage and holding system. Rather than design to the minimum necessary under the Consent Decree reached with Diane and her group, Formosa made the decision to design the internal system to a 100-year rainfall level, a move I consider to be very smart and forward looking. This redesign includes internal roads and culverts as well as a very large stormwater detention system set out in last year's coastal update. In essence, the improvements made by Formosa anticipate the changing rainfall patterns of the future due to climate change. This is a change which will likely be required in every plant on the coast due to the very real risk that process units will be flooded by the high intensity rains of the future.

Sometimes litigation can work out for the good of all parties. This seems to be one of those situations, although some days I am sure it is hard for Formosa to see a silver lining. I know that I do. And keep your eye on the carbon plans and plans for the circular economy being developed by Formosa and other plants. In the aftermath of the litigation, Ken Mounger became the Executive Vice President of Formosa Plastics and is working closely with multiple corporate-wide teams related to Environmental Social and Governance (ESG) goals. Together, they are developing some very interesting, state-of-the art plans to address the carbon footprint at the Formosa facility in Point Comfort. Figure 7 shows the carbon emissions reductions that Formosa has achieved since 2012 with more to come.



Figure 7. Carbon reductions for Formosa Plastics U.S. operations. Source: Formosa Plastics.

The Texas coast has many plastics plants. More are opening every day. The plastics market is saturated, and competition is hot. Competitive advantage will be hard to find, but one pathway to competitive advantage is to be able to offer the lowest carbon content plastics on the market as well as the plastic product with the most recycled content. Work currently underway at Formosa will decrease the carbon footprint of its product. Carbon footprint reduction will offer some excellent opportunities for air pollution improvement as more efficient processes come on-line and companies strive to replace cogeneration units with renewables. This is the future, and it is happening now on the Texas coast. Those who don't adapt will simply fail.

### 5. The Wastewater Polishing Wetland at Steel Dynamics

As you might recall, The Aransas Project (TAP) initially opposed the wastewater permit for Steel Dynamics because of concerns about the discharge of heavy metals into Chiltipin Creek and then into Copano Bay. After we filed a request for a contested case hearing, we worked with the Steel Dynamics technical team and worked out a settlement agreement that involved the design and construction of a 35-acre wetland intended to further improve the water quality of the discharge.

On December 9, Ann Hamilton, a TAP board member, Bryan French, TAP's attorney, and I drove down to Sinton and toured the plant site and the newly constructed wetland, and I am happy to say that it has been constructed and seeding and planting of wetland plants has occurred. At this time, wastewater has not begun to flow through the new wetland, but such flow will commence when the modified wastewater discharge permit is issued that incorporates the proposed polishing wetland into the discharge plan.

Here is what we learned. First, construction of the wetland began earlier this year and was completed when this photo was taken in June 2022. Figure 8 shows a diagram from that time period as well as the flow path of the wastewater. At this early stage, seeds were planted. This construction took place during a drought and the wetland was partially filled with supplemental groundwater from a well on site.



Figure 8. Photograph showing construction status in June 2022 with arrows added showing direction of flow and notations about different water levels included in the design. Image by Steel Dynamics.

A second image from the construction site is set out in Figure 9 and is from September 2022. This image shows the "greening up" of the site as a result of rains that came at the end of summer.



Figure 9. Photograph of the wastewater "finishing" wetland from September 2022. Image by Steel Dynamics.

In October and November, after Figure 9 photograph, wetland grass planting began to supplement the seeds that had been planted earlier. Somewhere between 150,000 and 200,000 wetland plants have been planted along the edge of this wetland that has been designed to optimize the opportunities for the removal of metals remaining in the water. Assuming that the modified wastewater permit is issued in the future, monitoring data will be collected to indicate the efficiency of this designed wetland in further removing metals from the wastewater.

When Ann, Bryan, and I went to the facility on December 9, we were taken on a tour to view the status of the wetland construction by Jon Ritter, the environmental engineer responsible for these wetlands. In addition to viewing sprigs of planted wetland grasses at various places throughout the facility, we saw wildlife on the water as well, including black necked stilts, a little blue heron, and several species of duck. Figure 10 shows an image taken of the wetland with Steel Dynamics in the background along with their piles of scrap metal waiting to be recycled in the plant.



Figure 10. Photograph of steel plant and scrap metal looking across the constructed wetland. Photo by Jim Blackburn.

It is interesting to work with a company you have opposed and negotiate an agreement intended to resolve a major conflict. Over the course of my 50 years as an environmental lawyer, I have been struck by how lawyers are taught to fight — to represent a client's position — and how we are not taught about resolving issues. I think that is in part due to law schools often being neutral as to concepts of right and wrong, choosing instead to teach lawyers to take one side or another and pursue it with all their intellect regardless of substantive right or wrong. By contrast, resolving disputes requires that each side recognize its own shortcomings while admitting the strength of the other side's position and working toward a solution that benefits both.

In the situation regarding Steel Dynamics, I believe that we were able to come together and work out a viable solution that will benefit Chiltipin Creek and

Copano Bay. We will continue to watch this situation and keep up with the wastewater monitoring reports.

#### 6. GBRA Comprehensive Habitat Conservation Plan (HCP)

As you may also remember from past newsletters, The Aransas Project (TAP) sued the Guadalupe Blanco River Authority (GBRA) in federal court to cause the preparation of a Habitat Conservation Plan (HCP) as well as to increase freshwater inflows into San Antonio Bay during times of drought. TAP won at the District Court level before Judge Janice Jack of Corpus Christi, and then lost at the Fifth Circuit Court of Appeals with Judge Edith Jones presiding, and then were refused a hearing by the U.S. Supreme Court. At the end of this process, Molly Cagle, GBRA's attorney, then General Manager Bill West, and I negotiated an agreement at a restaurant in Seguin to work together to find long-term solutions to the health and safety of the last flock of wild whooping cranes in the United States as well as to protect and enhance the quality of San Antonio Bay.

Over a few years, this agreement between TAP and GBRA led to a study to develop a Habitat Conservation Plan (HCP) that will cover all endangered species within the Guadalupe River watershed from its headwaters in the Texas Hill Country to San Antonio Bay. Figure 11 shows the area covered by the HCP with this effort being led by Nathan Pence of the GBRA staff. This HCP is very ambitious and covers the whooping crane as well the golden cheeked warbler, the red knot, the monarch butterfly, the piping plover, three species of salamander, and three species of freshwater mussels.



Figure 11. Map of the area covered by the GBRA Habitat Conservation Plan (HCP) with the boundary of the HCP shown in the dark black outline. Map from GBRA.

The basic function of a Habitat Conservation Plan is to develop policies and actions that will be followed by the HCP proponent in order that they can obtain an Incidental Take Permit (ITP) from the U.S. Fish and Wildlife Service if their actions cause a "take." In other words, the potential to take — to kill or injure — one or more of the identified species is acknowledged and actions and policies are agreed to in order to avoid such a "take" and the ITP insulates the proponent from prosecution for the "take." As proposed, this HCP will cover the activities of the GBRA that may affect these endangered species and could also be written to cover the actions of certain second parties whose actions also could affect these species.

The key here is to understand what actions may cause a "take" of the species and what actions the proponent may undertake to avoid such a "take." Here, any number of alternatives will be considered by the GBRA including water releases to the river and to the bay to avoid impacts due to declining water quantity and quality, as well as various concepts of habitat protection such as fee simple or conservation easement purchase of lands for whooping cranes, among others. The full scope of alternatives is currently being developed by a team of consultants that have been hired by GBRA. Details as to specific studies are under development and will be a key to the credibility of this exercise.

One novel approach that I will try to have integrated into the HCP is the use of carbon credits to protect Hill Country watersheds. Currently, a group of stakeholders are working with BCarbon to develop a carbon credit purchase concept associated with protection of oak-juniper stands from development moving west and southwest out of Austin and the IH-35 corridor. Under this concept, certain watersheds, springs, and important, iconic properties would be identified for protection and carbon credit issuance. In this way, an attempt will be made to ensure spring flow and river water quality by protecting the natural habitat within these watersheds and unique areas. Figure 12 shows the watersheds and some of the springs proposed for protection under this carbon credit concept.



Figure 12. The Blanco-San Marcos watershed shown in green is proposed as a part of a Hill Country carbon credit program that could help protect springs that contribute flow to the Texas coast. Image from Spatial Analytics and Research Consulting (SPAARC) for Jim Blackburn.

The point here is that there are several interesting interactions occurring in the Blanco-San Marcos-Guadalupe watershed. GBRA is setting a bold path with its goal of incorporating multiple endangered species within a watershed-wide HCP. This HCP will need new tools and concepts to achieve its purposes and carbon credits may offer the opportunity to offer a major new concept that fits into the voluntary nature of the HCP. The use of carbon credits was set out in the initial TAP-GBRA agreements, and they might yet emerge to be helpful in this HCP effort.

# 7. The Sea Port Oil Terminal at Freeport

The Sea Port Oil Terminal, an offshore oil export facility, has just been permitted off the Texas coast at Freeport, and it was permitted without much fuss or opposition. This new facility was approved by the Biden Administration the day after the COP 27 climate talks ended. And while this approval was met with disdain by some climate activists, I applaud this approval because it is the best way to export oil from the Texas coast - export which appears destined to occur. Figure 13 shows the location of the Sea Port Terminal.



Figure 13. Map showing the connections between Eagle Ford and Midland pipelines to the ECHO gathering facility to Oyster Creek to the Sea Port Oil Terminal (SPOT). Image from Housley Carr and RBN Energy.

I want to contrast this relatively easy approval process with the continuing controversy down in Port Aransas where the Port of Corpus Christi continues to persist in pursuing an onshore deep-water port for oil export. There is no way that the Corpus deep-water port will be permitted without a major environmental fight, and such a fight is **totally unnecessary**.

Offshore terminals such as the Sea Port Oil Terminal are a preferred alternative from my perspective. If we are going to export crude oil, we should do it in the manner that is the least damaging to the Texas coast, which is an offshore loading facility. The onshore facility at Port Aransas will require dredging the current 40-foot-deep channel to about 80 feet of depth and building two major docking facilities on Harbor Island.

There is no doubt in my mind that the environmental impacts associated with the onshore facility at Port Aransas will be significant and could harm the productivity of Corpus Christi and Aransas Bays by bringing more saltwater into these bay systems that already approach hypersaline conditions during drought conditions. Additionally, whooping cranes spend the winter adjacent to Harbor Island on the backside of Mustang Island and the endangered Kemps ridley sea turtles use the pass at Port Aransas as do shrimp, crabs, and most finfish that exit the bay periodically as part of their life cycle.

From my perspective, the unnecessary destruction of the Texas coast must be avoided, and in the case of oil export, it can be. We should all let our elected officials know that if they feel they must approve oil export, then they should do it in the least damaging manner, which is offshore terminals that have been operated safely around the world for decades. No alternative is without risk, but offshore terminals are by far less risky to the future of the Texas coast than is a new, dredged onshore facility. And I urge you all to try to convince the Port of Corpus Christi that there is a better way to go forward in the future. I would enjoy nothing more than helping the Port of Corpus set out on a bold new direction, one that those concerned about the future of the coast could support. Now that would be truly noteworthy.

### 8. Matagorda Bay Foundation and Dog Island

I have another excellent result to report. About three years ago, the Matagorda Bay Foundation (MBF), with the help of Clive Runnells and his family, executed an arrangement to obtain the approximately 500 acres of mostly marsh that we call the Dog Island tract. Bill Balboa, the Executive Director of MBF, put this deal together with the help of board member Fred Parks and supporter Scott Mitchell. Together, they were able to secure the land and hold it until it could be transferred to Matagorda County with a lease-back by the Foundation.

On December 9 after touring the Steel Dynamics wetland, Bryan, Ann, and I met Al Garrison, another MBF board member, at Matagorda and did a bit of fishing and touring on Matagorda Bay. The afternoon tide was low, and the fish weren't biting, but the bird life was magnificent. Decades ago, the Colorado River was diverted from its exit point into the Gulf at Matagorda and redirected through a diversion channel into the main body of Matagorda Bay. Over the years, silt and trees that flowed down the Colorado have been deposited in this new delta, forming one of the most unique places on the Texas coast.

Dead trees lodged along the channel and along the side of the marsh are perfect resting places for many different types of birds, and we were not disappointed. Ospreys were very common in this area as were brown pelicans and all types of terns. But the bird of the day for me was the white pelican which are now down for the winter. Sitting on a log as we came out into the bay, the white pelican dwarfed the four brown pelicans sitting nearby. And then from a distance, we could see the shoreline of the delta lined with large white bodies, a flock of fifty or more pelicans feeding together.

As a result of this trip, I came back and added a poem to the white pelican to the two I had selected previously. And do I ever love the Texas coast.



Figure 14. Ann Hamilton and Al Garrison enjoying the marsh and each other's commentary on Al's boat in a bayou extending up into the Dog Island marsh on Matagorda Bay. Photo by Jim Blackburn.

### 9. Poetry

As many of you may know, I have been writing poetry about the Texas coast for some time, often in association with the art of Isabelle Scurry Chapman. Isabelle and I put together a book last year called *Earth Church* that has almost 100 painting and poem pairs. *Earth Church* is about my spiritual connection with the Texas coast and the Earth in general and comes after the conclusion of what we called the <u>Virus Vigil</u> which began with the start of the COVID lockdown in March 2020. Isabelle and I produced a poem and painting a day for 365 days to stay connected with old and new friends. If you are interested, you can contact me at <u>ibb@blackburncarter.com</u> and I will be happy to sell you a copy. We still have a few left. The first poem is about the Anhinga which I saw at the J.J. Trace in the Trinity Delta, an area that would have been flooded by the Wallisville Reservoir that was proposed in the 1960s and opposed in court cases in the 1970s, 1980s, and 1990s. I was involved in this battle when I became second chair to Ray Berry who represented the Audubon Society in the 1980s when the case returned to federal court after the environmental impact statement had been rewritten as ordered by Judge Carl Bue. Later, I was lead counsel when a smaller version of Wallisville came back in the 1990s, an effort we held off until it was finally replaced by just a saltwater barrier that was constructed and exists today. This was a multi-decade effort that ultimately protected 25,000 acres of some of the most beautiful bottomlands and wetlands on the Texas coast. So enjoy the poem about the Anhinga, knowing that this area where I saw this bird is very special and important to me.

# Anhinga



Figure 15. Anhinga by artist Isabelle Scurry Chapman.

# The Anhinga

The ponds are heavy, filled with water, The birds gathered up for this author, Ibis and coots, cormorants and moorhens, All feeding together like a group of friends.

They move in the water and up on the land, Green floating pads pushed aside by the band, Some are competing, feeding aggressively, Others lay back and move in cunningly.

The snake bird – the anhinga – stands out, unique, An animistic God daring you to speak, I can see heathen worshipers celebrating the neck, Hoping to keep bad fortune in check.

The anhinga moves like a submarine, Periscope raised, tail engine not seen, A magnificent paddle, an identifying mark, I'm sure glad the anhinga made Noah's ark.

Wallisville was saved by those who cared, Who were willing to fight, stood and dared To take on authority, to challenge the boys Who used to treat nature as their toys.

A reservoir proposed that was not needed, A message delivered yet often not heeded, A plea to find less damaging ways To preserve our heritage for future days.

Today I gaze at the wonderful snake bird, And know I must try with a well-chosen word To convey the awe and love that I feel For this natural jewel, so fine, so real.

Today I attended Earth Church at Wallisville, And what I found here will ward off ill, This bird, the snake, has infused my spirit, I'll take this good karma, hold it, and use it.

So welcome to Earth Church, Pull yourself up a pew, Come and see the anhinga, It has a message for you.



Figure 16. Least Tern by Isabelle Scurry Chapman.

# Least Tern (a.k.a. liar bird)

We met the guide at the dock at daylight, Ready for a day of fishing delight, We raced on the bay at the break of day, Glad that the wind had decided to lay.

We fished the shoreline of upper Trinity, But we hadn't filled our chest with plenty, The day was running long and hotter When the guide pointed out toward open water

Now fishermen have been known to look For clues of where to throw their hook, And birds circling over a particular spot, Is often a promise of fishing that's hot.

We fired up the engine and raced to the site, All anglers ready to catch the bite, But the guide held a hand up, looking grim, Saying "Boys, say a prayer and sing a hymn".

Before us the terns were plunging and diving, We took many casts but no high-fiving, The least tern was feeding but not on shrimp, Leaving our lines wet and limp.

Our guide stood up tall on the side of the boat, And he sounded out with a sour note, "You little buggars are liars, liars, Why do you gang up and against me conspire?"

Unperturbed the tern flew off toward the land, Heading directly for its nest on the sand, Where it joined its mate in raising the young, Which is lots of hard work and little fun.

The tern's nest is right next to the beach Where it often fails to stay out of reach Of the party-searching cars of city brats Or the marauding ventures of feral cats.

When the chick emerges, it's a great moment, For the tern's numbers are below their quotient, And while our coastal terns aren't endangered We all should ensure that we maintain this bird.

So welcome to Earth Church, Pull yourself up a pew, Say a prayer that least terns Will raise a chick for you.



Figure 17. White Pelican by Isabelle Scurry Chapman.

# The White Pelican 4

We had come to the bay at the end of the day, The fog and the rain had burned away, With the sun the birds had come out to play, I love to come back to Matagorda Bay. The boat sped down the water like glass, My eyelids pushed shut, we were moving fast Down the Intracoastal and around a bend, It was oh so nice to be back again.

The osprey was perched on the highest branch, Sitting and munching on his latest catch, The silvery fish grasped by talons of steel, A sobering sight both real and surreal.

Along the channel the kingfisher rose, Chittering away - telling all its woes About his dismay that we chose this day To interrupt his fishing on Matagorda Bay.

The white form emerged sitting on a log That was firmly grounded in the soft silty bog, A perch she shared with her cousins brown, A dominant presence only missing a crown.

For the white pelican ruled this perfect roost That the processes of nature had produced, Geology in action, a snapshot in time, An image so powerful, so sublime.

Later the flock was working together, All in a line as if on a tether, Herding the fish so all could feed, Working so all could meet their need.

I left with the image of this big white bird Compelling me to write a poetic word, Setting out for all the beauty and the power Of soul stirring flashes from a magic hour.

So welcome to Earth church,

Pull yourself up a pew, Here we honor the white pelican, And you might too.

In closing, let me thank you for taking the time to read this newsletter. I hope you enjoyed it. Since it is the end of the year, many of you may be looking for good non-profits to which to donate. And while there are many groups out there, I suggest the following, each of which is tax deductible. With gratitude for the Texas coast. Blackburn

BCarbon 4709 Austin St. Houston, TX 77004

Texas Coastal Exchange 4709 Austin St. Houston, TX 77004

Matagorda Bay Foundation 4709 Austin St. Houston, TX 77004