



Bulk Rate
U.S. Postage Paid
Permit No.1013
Foley, AL 36535

Friends of Perdido Bay ADDRESS SERVICE REQUESTED
38 S. Blue Angel Parkway
PMB 350
Pensacola, FL 32506
850-377-4264

Tidings The Newsletter of the Friends of Perdido Bay

February 2024

Volume 37 Number 1
www.friendsofperdidobay.com

Jackie Lane -Editor

Looking Forward to a New Year

Thank you for being a member, and stay tune for what may be an exciting year. Some of our members have been with us since we were founded in 1988. Some are dead. All who have lived here for any length of time know our bay should be better. Perdido Bay could be an amazing bay. Full of red fish and trout, flounder and mullet; shrimp and blue crabs, and maybe even oysters. The main source of water into Perdido Bay is the Perdido River and it is very clean. It has remained nearly pristine because of the forest plantations along the river. Many of these forest plantations have been bought by Florida and Alabama for conservation and will not be developed. So the future looks bright. As the biological consultant for the paper mill once wrote, there is only one major discharger into Perdido Bay-a pulp mill. It looks like it maybe closing. So stay tuned and thank you for your financial support. It has made the difference.

IT IS ONLY A MATTER OF TIME

Last Fall, International Paper in Cantonment Florida announce that it was permanently closing down one of its two paper machines. According to newspaper reports, this was the smaller of the two paper machines which made fluff pulp. It was older than the only one left operating, #5. Paper machine #5 was the largest paper machine in the world when it was installed in 1980 by St. Regis. It was a thing to behold. I took students up to St. Regis to see this massive machine. But as time went on it was surpassed by newer, larger paper machines at other mills. In papermaking, bigger is better.

The paper mill in Cantonment, Florida was built by John Pace in 1941. It was called the Florida Pulp and Paper Company and as John Pace once said, was built to utilize the timber which the Pace brothers grew in their forests in Pace, Florida. In 1945, it was joined by the Alabama Pulp and Paper which used the forests in Baldwin County Alabama for making paper pulp. The process which was used to break down the pine trees to make paper pulp, was a chemical process. It used sodium hydroxide mixed with sulfur in a pressure cooker called a

digester. The digester could be a continuous process or it could be a batch process. Usually a third of the brown paper pulp was bleached. The chemical companies which sold sodium hydroxide to the paper mills made the paper companies also buy a chlorine type bleach. The paper companies had to recycle their sodium hydroxide in order to be profitable. They recycled the sodium hydroxide in a big huge furnace called a recovery furnace. After the fibers from the trees were cooked in the alkaline brew and removed, cooking chemicals and the residue, called lignin, were left. This mixture called black liquor could be burned in the recovery furnace and the cooking salts recovered.

The recovery furnace at the Pensacola mill must be an original, installed in 1941. Recovery furnaces are the heart of the paper mill. The recovery furnace at the Pensacola mill was one of the first generation of recovery furnaces. Later generations of recovery furnaces were more efficient and produced a lot less pollution. Because of their expense, I doubt that owners of the Pensacola paper mill, replaced this old recovery furnace; maybe adding new parts. According to a report in Wikipedia, the newest recovery furnace was built in Mississippi in 1987.

Maybe you can see where this story is going. The paper mill in Cantonment Florida is OLD. And it is to the credit of American manufacturing that these companies have been able to keep running these old mills. When Champion International took the mill over from St. Regis in 1984, it had deteriorated badly. I took students to the mill in the early 1980's, and the corrosiveness of the chemicals had caused many of the steel parts in the mill to deteriorate; steel ladders, steel supports etc. were eaten away by the chemicals. Champion International had spent a lot of money to bring the mill back. But after awhile, it is not worth the money, especially if the price of paper pulp is low. The supply of pulp is too great, and the price is low. It appears that this is the market today - low demand. So these old and less efficient paper mills are closing.

One of the first old mills to close was the mill built in Port St. Joe in 1938 by duPont. It harvested trees from its 750,000 acres of timber in North Florida. This mill closed in 1999 and decided to use its property for development. Development was slow and in 2013, the St. Joe Company sold much of its property to AgReserves which is the Mormon Church.

In the early 1930's, International Paper was one of the first Northern paper companies to establish paper mills in the South, in Mobile, Alabama and Panama City, Florida. Started in 1931, the Panama City mill was the first paper mill in Florida. When International Paper bought the mill in Pensacola from Champion in 2000, the mill in Mobile Alabama closed. The papermill in Panama City Florida was bought by Southwest Florida Industries in 1979 and then WestRoc. It closed in June 2022.

Another paper company, Georgia Pacific, announced the closing of the mill in Perry, Florida in October 2023. It was 69 years old. Just prior to announcing the closing, Hurricane Delihia tore through the area. It caused significant damage to the timber industry there. A large chunk of timberland had been owned by Foley Land and Timber but in 2015 was sold to an investor. It looked like the investor was more interested in developing the land rather than holding it for timber investment. Georgia Pacific was looking for a buyer for the Perry mill. If Georgia Pacific does not find a buyer for the mill in Perry, the town of Perry Florida will suffer.

The pattern is clear, many of these very old mills which were established once sustainable forestry became popular in the 1930's and 1940's, are closing. They are not as efficient as newer mills, and the cyclical nature of papermaking is showing a downturn. After the civil war, pine trees replaced cotton as the crop of the South. First the pines, mainly longleaf (called heart pine), were clear cut and shipped all over the world. The pilings sticking out of the water in the northern part of Perdido Bay, are remnants of six sawmills. Longleaf pine trees were harvested in the Perdido River watershed and sent down the river as big log rafts. These pines were cut into boards and sent to the Port of Pensacola on a small train line called the Pensacola and Perdido Railroad. The logging town surrounding the sawmills was called "Millview". At the turn of the 20th century, Millview had nearly as many residents as Pensacola. The shipping of timber from logging the longleaf pines from the forests around Pensacola created a heyday for the Port of Pensacola. Sailing ships from around the world could be seen in the harbor.

Once the longleaf pine was clear cut second growth forests sprang up. The longleaf pine was replaced with a faster growing pine, the slash pine and the loblolly. People saw that pine forests could be managed and not completely cut down. But it required a continuous market for trees, and paper mills were the answer. Many of the Northern paper companies moved south for the supply of fast growing pine and cheap labor. St Regis and Champion were northern companies which moved south. International Paper was also founded in the North. It has moved South to Memphis.

SO WHOSE FAULT WAS IT?

Why was our bay polluted so long? There are many reasons for it. First, the regulators. As the 1999 grand jury convened in Escambia County found out, the local regulatory agency, Department of Environmental Protection and the district director, Bobby Cooley, did not do it's job to enforce the rules. According to an article in the archives of the Tampa Bay Times dated July 8, 1999, "the district office succumbed to political, economic, and other pressures, allowing regulated businesses, industries and individuals to pollute the area's air and water. The district director, and others acting on his behalf, ignored and concealed environmental violations against the sound advice of staff employees." (Julie Hauserman, 1999). Bobby Cooley squarely took the blame. However, he served at the pleasure of the local politicians.

Governor Jeb Bush replaced Bobby Cooley. Then we had a series of "fixes that didn't work." Or as I call them - shams. Jeb Bush named David Struhs as the Secretary of DEP. David Struhs was the brother-in-law of Andrew Card, George Bush's Chief of Staff. That was when International Paper went to a wetland treatment and spent \$100M on doing studies to try and show its effluent wasn't harmful. But alas, the wetland treatment didn't work either. It may have reduced the nutrients going into the bay, but that was not the problem either.

The consultant which worked for Champion and then International Paper, Dr. Livingston, had identified the problem in Perdido Bay as "too many nutrients". He said too many nutrients caused blooms of toxic algae. Blooms of toxic algae were popular in those days (late 1990's and early 2000's). We didn't believe that story. We had never seen dead fish or other signs of toxic algae. And as Dr. Livingston later conceded in a 2007 report, "the bay just slipped away". So maybe Dr. Livingston was wrong and IP spent \$100M on a wasted

projected. They certainly couldn't get a permit for discharging to Perdido Bay because it was still dead.

The EPA and the Clean Water Act are also to blame. The EPA issues permits to paper mills using effluent guidelines which are in the federal rules. These are technology based guidelines. The EPA develops these guidelines by going out and finding the mills which control their pollution best and looking at the technology which the mills use. EPA calls this "Best Available Control Technology". Well naturally, the paper industry doesn't want to have to install expensive control technology so no mill is going to develop a control technology which may make all mills have to install that technology. The paper industry is adverse to change. The technology which IP uses in Cantonment is considered "Best Available Control Technology". The problem is - the mill dumps into a small bay which doesn't flush.

The EPA is also at fault by allowing the paper industry to use chlorine dioxide as the bleaching agent. As we have seen on Perdido Bay, chlorine dioxide breaks down into chlorate which is a potent herbicide. This has upset the primary productivity in the bay. When IP blew up in the Spring of 2017, the first thing to reappear were the algae. Everything else followed. The switch to chlorine dioxide occurred while Carol Browner was head of the EPA. I am certain that EPA scientists knew that chlorate was a byproduct of chlorine dioxide bleaching. The other byproduct, oxygen, would have been very helpful to an industry that put out huge amounts of oxygen-consuming sludges.

I also blame International Paper. But IP is a publically traded company that is "owned" by Wall Street investment firms. At last check, Vanguard owned 22% of IP. This means the investment firms expect IP to produce a nice dividend, and they do. Five percent isn't a bad investment. However if the investment firms take most of IP's profit (and they do) in dividends, there is nothing left for improvement in pollution control or even in a new mill. It is a sad story.

NO IMPROVEMENT YET

Even though IP has cut back on its production, we have yet to see any improvement in the bay. We will continue to monitor the situation. So stay tuned.

| | | | |
|--|--------------------------|---------|-----------------------|
| Membership and Renewals | <input type="checkbox"/> | New | Amt. Enclosed\$ _____ |
| Tidings is published six times a year by Friends of Perdido Bay and is mailed to members. To keep up with the latest news of happenings on Perdido Bay, become a member or renew your membership. For present members, your date for renewal is printed on your mailing label. | <input type="checkbox"/> | Renewal | |
| Membership is \$30.00 per year per voting member . To join or renew, fill out the coupon to the right and mail with your check to the address on the front. | _____ | | |
| Friends is a not-for-profit corporation and all contributions are tax-deductible. Funds received are all used for projects to improve Perdido Bay. No money is paid to the Board of Directors, all of whom volunteer their time and effort. | Name | | |
| | _____ | | |
| | Address | | |
| | _____ | | |
| | Phone (_____) | | |
| | e-mail _____ | | |