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Tidings

The Newsletter of the Friends of Perdido Bay

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Jackie Lane -Editor

Thank you again.

Thank you again. Your support means everything. With your support we have been able to conduct testing to show that International Paper has been lying to the regulators. Unfortunately our environmental agencies are understaffed and not able to do much regulation. We would like to think that our environmental agencies would do their jobs, if they were just funded properly. Maybe. But the politicians who doll out the tax dollars, don't want our environmental agencies to do their jobs. It is a sham to make you think you are getting protected. You are not and it is kind of scary. There seems to be little that state and even federal governments can do, in the face of big money.

So Friends of Perdido Bay will do our best to let you know what the state of the bay is, although you probably know already. If you have lived on the bay for awhile, you can see the decline. Shrimp boats no longer go up and down the bay. You see very few fisherman. A crabber put four crab traps out in front of my beach. They have been there for a least two weeks. So I went out to see how many crabs were in the traps. In four traps, I found one small crab and two living catfish.

To let you know how much impact we are having - International Paper still does not have a valid permit after 35 years of trying and our politicians are returning our newsletters unread. Not much of a success story, but it would probably be worse without our involvement.

Gridlock

In 2012 under Governor Rick Scott, Florida gave up on trying to manage growth. The Department of Community Affairs was disbanded and renamed Department of Economic Opportunity. Before the DCA was disbanded, Friends of Perdido Bay was involved with the concept of growth management. Along with the League of Women Voters, we went to many meetings and zoning hearings trying to get the county to manage its development. Put development where there was infrastructure to support that development, etc. It was hard. Landowners complained because occasionally they couldn't do everything they wanted to do.

They couldn't make as much money as they wanted. Growth management was a hard sell, especially in a county, like Escambia, which had a lot of undeveloped land. Well, the days of growth management are over. There is still some growth planing, like the sector plan in Beulah, which had gotten so much attention. But for the most part, planning is over. Florida legislature passed a law this past year allowing lawsuits against government agencies if they interfere with a person's desire to develop their property (i.e. make as much money as possible). Even zoning laws may come under fire.

Now that Florida has no growth management plans, developments seem to be springing up everywhere. There is one which is very obvious to Perdido Bay residents on the west side of the Theo Barrs bridge. The development is called Altura. It looks like a very nice, luxurious place. There are 1,2, and 3 bedroom apartments for rent. A one bedroom with 696 sq ft rents for \$1,745. There is a salt water pool, spa and all the amenities. You can probably walk to Publix. But what about the traffic? How do you get out onto Perdido Key Drive or maybe Gulf Beach Highway? There are going to be 325 apartments in this complex and it is situated at an intersection which is already stressed on weekends. This situation certainly looks like gridlock. Are they going to build a four-lane bridge? Probably not for awhile.

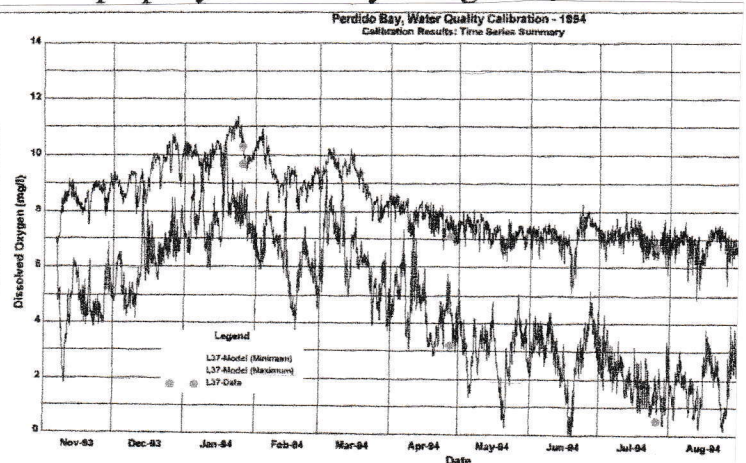
And how about water and sewage. Is the sewage going to come to Bayou Marcus Wastewater Treatment Plant? This plant is already overcapacity and so are the wetlands which accept the sewage. The only reason we don't have algae blooms from the overloaded wetlands is because IP's chemicals keep it under control. This is something we will discuss in the next section. Well folks, this is going to stop - I mean the overloaded sewage treatment plant.

Allowing growth like this is going to lessen our quality of life in Escambia County and especially Perdido Key. The idea behind growth management was you had to have the infrastructure in place before you allowed more growth. It was called concurrency. The planning boards don't even know what that word means anymore. There have been study after study which show that growth does not pay for itself. You either have to raise taxes or suffer a decline in quality of life. Nobody wants higher taxes so we are going to have to sit in our cars and wait to get to the beach on weekends. It is not going to be pleasant.

Who are the developers behind Altura? Local? Hardly. There are Altura housings developments all over the U.S. Besides housing developments in the U.S., the Altura conglomerate owns supermarkets, banks, and investment companies. It is a Southeast Asia conglomerate based in the Philippines. The Perdido Key Association saw this Innerarity land being cleared in 2022 but there was little they could do. This may have been the impetus for the push to incorporate Perdido Key. I certainly don't blame them. But under Florida law now, a government entity can be sued for trying to stop a development like this. This is a sad day and Florida politicians are to blame. Go Beulah residents!! Fight for the community you want. Don't accept a D.H. Horton community. Your property values are your right to protect.

A Manipulated Environment

Meanwhile back here on Perdido Bay, Friends of Perdido Bay has been trying to understand why there has been a decline in life on our bay. You can call it - "CSI Perdido Bay". It is pretty obvious that the paper mill has had a big part in this decline. Being allowed to discharge the huge



amounts of organic discharges into our bay definitely would cause a depletion in oxygen, especially in the summer. As shown in the above graph (top line is surface water, bottom line is bottom water) a model of predicted dissolved oxygens at one station in Perdido Bay, done in 2007 by the Florida DEP, shows that in the summer, dissolved oxygen falls to low levels. Yet in today's Perdido Bay(2023), we have no such problem. Matter of fact, dissolved oxygen is perfect, even above saturation values at both surface and bottom!! Why?

Has International Paper stopped dumping? No. IP is dumping more now than in 2007 when the modeling was done. The dissolved oxygens in Perdido Bay should be lower than what was predicted in 2007. The reason dissolved oxygen is so high in Perdido Bay, especially Upper Perdido Bay is **becasue IP is using a bleaching agent which releases dissolved oxygen in an alkaline environment** . In other words, the oxygen values in Perdido Bay are being manipulated to look better.

Then there are nutrients. Upper Perdido Bay is not meeting the state standard for chlorophyll a even though it is pretty high. What do you do for that problem. Well, just ask yourself what you do for a swimming pool. You add chlorine. That is exactly what International Paper is adding to the bay through their discharge into Elevenmile Creek. I was shocked to find that chlorine was present in the water samples we sent out for toxicity analysis.

Recently and since 2017, Perdido Bay has looked especially dead. The once huge clam population which existed in the 1980's and 1990's is gone. These clams, *Rangia cuneata*, were so numerous they paved the bottom of the bay. I studied these clams and wrote several scientific papers on these animals. I calculated that they were so numerous that they would filter all the water in the Upper Bay in three days. Today, baby clams appear in the sediments of the beach where I live, but soon die. Along with dying baby clams, there are no algae growing on the rocks at my beach. I had put down rip rap several years ago to try and protect my bank against hurricane storm surge. The chunks of concrete are there, but nothing is growing on them. In a bay which has a lot of nutrients, the lack of algae indicated that there was a problem. So in May of this year, I sent water samples off to do algal toxicity and toxicity to larval mussels. Water from Site#1 was from Elevenmile Creek north of the Kingsfield Road Bridge, just as it comes off the IP site. The other site (Site #2) was my dock in Upper Perdido Bay. The mussel larval toxicity tests were sent to a certified lab in Port Gamble Washington. For the algal toxicity, I was only able to collect water from Upper Perdido Bay at my dock. The one algal toxicity test was sent to a lab in Gainesville, Florida which we have used before for other toxicity tests. Friends of Perdido Bay dues paid for these tests.

The results came back. The one-celled green algae, *Dunaliella*, was not significantly affected by the water in Upper Perdido Bay. At 100% Perdido Bay water, there was a slight decline in cell division after 96 hours, but it was not significant. The same was true of the mussel larvae after 96 hours of exposure to 100% Perdido Bay water. There was no effect. However, the Elevenmile Creek water which was coming directly off IP property was toxic to larval development. Elevenmile Creek water had to be diluted to about one half strength before there was no effect to larval development. This was significant. What is in Elevenmile Creek water to cause this larval development effect is not known. But the laboratory found free chlorine in the water samples. I was amazed. The free chlorine concentration from Elevenmile Creek water was 0.04 mg/l and from Perdido Bay was 0.02 mg/l. While these

levels are not particularly high, there should be no free chlorine showing up in Perdido Bay. Free chlorine would help to suppress algal and bacterial growth in Perdido Bay. Whether free chlorine is responsible for abnormal larval development is also not known. But I have suspected that IP is dumping the stuff from their alkali wet scrubbers down Elevenmile Creek. This discharge comes from the power boilers and depending on what they are using for fuel in their power boilers, a lot of nasty chemicals may be in the discharge coming down Elevenmile Creek. It would be a clear discharge and people might think it is safe, but may not be.

The results of our toxicity testing are on our website in an abbreviated form. They have also been sent to the DEP. We will see what DEP says.

Several years ago, there was a report of a man that took his dog swimming in Elevenmile creek. The dog had convulsions and died. In recent sediments studies, Friends of Perdido Bay has found increasing levels of barium and arsenic in the sediments. Could Elevenmile Creek be the source? We don't know.

This discharge by IP into Elevenmile Creek would be illegal. IP is only supposed to discharge stormwater into Elevenmile Creek and these samples were taken in May when there had been very little rain. So there should not have been any significant stormwater discharge. IP is not required to test Elevenmile Creek. I also think IP's discharge into Elevenmile Creek maybe intermittent. I can see a different water mass float by my dock ever so often. Whether this comes from IP or from ECUA, I do not know.

Applied For a Grant

The Pensacola and Perdido Bay Estuarine Program gives out yearly grants totaling \$250,000. The size of the grants range from \$10,000 to \$50,000. Friends of Perdido Bay applied for one. In trying to find out why baby clams appear and then disappear in the sediments of Upper Perdido Bay, we are asking for a continuous water quality monitor which we can suspend from a dock. We would continuously measure five water quality parameters while at the same time look for baby clams (and larger ones) in the sediments. We would see if there is any water quality parameter which may explain the disappearance of the clams. It would be nice to get the clams back, as well as many other forms of life.

Also in the last newsletter, I extolled the virtues of swimming in the bay. Since getting back the results from the toxicity tests, I have changed my mind. Maybe it is not safe to swim in the bay, even though bacterial counts do not seem to be elevated.

Membership and Renewals

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.

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.

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