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# Tidings

The Newsletter of the Friends of Perdido Bay

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[www.friendsofperdidobay.com](http://www.friendsofperdidobay.com)

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## **Happy Holidays and see you in 2020**

We want to thank you for your support in 2019 and for the many previous years. Your support has helped us remain active and a force (small one) to try and keep our government honest. Without our voices, our environmental agencies would have just given International Paper a permit - no problem. But we are here to point out the pollution and the problems the paper mill has caused in our small bay. Thank you for your support. 2020 is going to be a critical year in our fight.

## **A Different Animal**

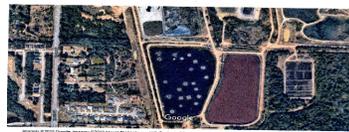
In the last newsletter, we talked about the Consent Order which the Florida Department of Environmental Protection had drafted for International Paper's violations of the toxicity standard. International Paper's effluent had been toxic to the little water flea since 2012, and intermittently before. DEP had proposed a fine of \$130,000 for violations since 2015 through 2019 and fines for each future monthly test which did not pass. International Paper must have balked at the first Consent Order. We now have a new draft Consent Order which is entirely different from the old Consent Order. Basically the new Consent Order which is still in draft form, will be a new permit with fines which will allow them to operate for three more years. What makes the second draft a permit, whereas the old draft was only fines, is the inclusion of "interim" permit limits in the second draft. These limits would be good for three years from the date of execution of the Consent Order. The new Consent Order also requires IP post a \$1Million dollar bond for future environmental projects.

Our luck at administrative hearings has been about 50-50. We have won one and lost one. The one we won in 2007 was a brief victory. IP turned around and made another application for a permit (nearly the same application as the application for the hearing they lost). We went to a hearing on this second application and lost in 2010. The DEP issued the new permit with a Consent Order which is the one IP is operating on now (even though it has expired). The Perdido Bay Environmental Association (PBEA) went to an administrative hearing in 1987 and lost but not before the Florida DEP had to withdraw the proposed permit and issue a new permit with a Consent Order. The paper

mill has been operating under a Consent Order ever since. The Consent Order means they can not meet water quality standards. The paper mill couldn't meet standards then and they still can't. The hearing officer in the 1987 hearing said that the owners of the mill (Champion at the time) needed time to decide how to clean up. I suspect after thirty years if the mill has not figured how to clean up and meet standards, they never will.

Over the years, the problem is that the paper mill would install some "clean up" technology and then increase production. This increase in production always negated any improvement in their effluent or caused new problems. The last improvement IP made was going to a wetland and also adding activated sludge treatment. Both of these improvements helped remove nutrients and Biological Oxygen Demand (BOD). However they increased their production from 1500 air-dried tons of pulp per day to 2500 air dried tons of pulp per day. With the improvements, IP was easily able to meet their

BOD and nutrient limits so they turned down their aerators in their ponds to save money. Aeration in their treatment ponds is necessary to remove toxicity of the effluent. When IP turned down the aeration, their effluent became continuously toxic. But, important to them, they also saved money on energy. IP would rather save money than save Perdido Bay. See the pictures at the left; 1999 ponds with aeration and 2019 ponds with less aeration. Interesting the DEP never saw any problems when they inspected the mill.



IP ponds 1999

IP ponds 2019

So in 2019, with our new environmental governor in Florida, Ron DeSantis, the DEP got tough and began fining IP for the failed toxicity tests. Or rather tried to fine IP for their toxicity. Fines are negotiated using Consent Orders; both parties have to agree on the fine, otherwise DEP must go to Circuit Court. DEP would rather negotiate than fight big business in court. It is less expensive and the industries know this. So IP refused to sign the first Consent Order, holding out instead for a better deal. The better deal is a permit for three years. IP can not get a permit otherwise, because they are still violating water quality standards and harming Perdido Bay (more on this subject later in the newsletter). Also because upper Perdido Bay is impaired for both Enterococci (a bacteria) and nutrients (Chl a), discharge permits can not be issued until these impairments disappear or until DEP finds where the problems are coming from.

Getting a permit using this Consent Order is not going to happen. Why? **We are going to fight it.** The DEP uses a Florida Statute to issue permits and give out Consent Orders. This statute is 403.088(d) and (e). (D) says permits can not be reissued if "the department finds that the discharge will not comply with .....applicable statutes and rules". Well obviously IP's discharge does not comply with the rules. End of story. Deny the permit. But wait a minute. There is a section (e) to this Fl. Stat. 403.088. (E) allows the department to reissue the permit if 1 of 6 conditions is achieved, even if the discharge is not meeting standards. I can not see that IP is meeting any of the conditions in section e. In addition, this section (e) makes this statute internally inconsistent and thus makes the statute unconstitutional. Through the years, the department has used this

one section to continue reissuing permits to the paper mill in spite of the fact that they have never complied with standards. It has made the permitting process a joke.

So, we wait. First we will send in comments about the draft Consent Order. Then we will challenge it at a Statute 120 hearing once the “Intent to Issue” the Consent Order is formally published. It is amazing how the public has had to spend their own money and protect their own bodies of water even though we have tax-payer funded government agencies which are supposed to do the job.

### **Degraded**

In the recent Pensacola News Journal article about the pollution in the local waters and the failure of the environmental agencies to correct the situation, the News Journal article mentioned that the study which Friends of Perdido Bay commissioned in 2018 (on our website) was controversial. It is only controversial if you are a non-scientist and trying to understand what it says, like two Escambia County Commissioners. The report was in no way biased against IP in assessing the lack of life in the four stations in Upper Perdido Bay. The report never stated that IP was the reason that so little diversity existed. Instead the report, blames the degraded condition on the usual culprits: low dissolved oxygen, rapid changes in salinity, etc. The report just gave the numbers. For biologists looking at this report, it is clear that Perdido Bay is not healthy and getting worse. The report did find life, but very little. The report calculated diversity indices. While these diversity indices have their short comings, they have been used since the 1970's to assess the health of water bodies. So we have lots of past species diversity indices to compare.

Since the 1970's, diversity indices in Perdido Bay have not been good; rarely exceeding 2. Four would be considered a good number. But Perdido Bay has been polluted since 1940's with the paper mill discharges. In 2007, a DEP biologist called and said the agency was doing benthic collections and finding little life. I tried to get a hold of this report but that data was lost. Dr. Livingston, IP's consultant, did his last benthic study in Perdido Bay in 2007. He also found very poor life and diversity. He attributed this poor diversity to a bloom of toxic algae, *Heterosigma*. IP stopped doing benthic sampling after 2007. No one was doing any benthic sampling, so it was not possible to say whether Perdido Bay was getting better or worse. Most was just antidotal information. Politicians were saying it was getting better; citizens who live out on Perdido Bay were saying it was getting worse. This is why Friends of Perdido Bay commissioned the study in Fall 2018. It was a small study, only four stations and one trawl.

The results showed just how degraded Upper Perdido Bay was. At all four Upper Perdido Bay stations, so few animals were found that a valid species diversity index could not be calculated. The trawl produced large numbers of small fish (spot) but very poor diversity - 0.04 (remember 4 would be good). More important, our data showed that since 2015, the number of animals in Tee and Wicker Lakes had declined. In 2015, Dr. Nutter, IP's consultant, had collected 929 individuals in Tee Lake and 589 in Wicker Lake. Our 2018 study showed 261 individuals in Tee lake and 69 in Wicker Lake. This is a decline of 72% and 89% in these lakes. IP can not say their wetland treatment is improving life in the marsh wetlands because we have the numbers to show it is not. So our study is the latest study to show how degraded life in Perdido Bay is. Tasting of the water, like Commissioner Underhill did, shows nothing.

## Scotch and Soda

Earlier in the summer, when I began swimming in Perdido Bay, I noticed my skin was stinging. I got out smelling like a rotten egg and like sulfur. I couldn't figure out what was happening. My grandchildren came down and wanted to swim in the bay. I was very worried it wasn't safe. Then International Paper announced they were removing their green house gases and converting from using coal to using natural gas. I guessed what was happening. Their green house gases were going into Perdido Bay.

It is good that these large companies with their huge emissions of carbon dioxide and sulfur compounds are taking steps to reduce their emissions. **But dumping them into little rivers and small bays is not the answer.** IP has three main power boilers at the mill. They have converted these boilers to using natural gas instead of coal. This is an excellent improvement. Much of the heavy metals and some of the PCB's which we found in the sediments of Perdido Bay came from using coal. It was not a good fuel. But capturing carbon dioxide using sodium hydroxide air scrubbers and then putting this stuff in our waters is killing everything.

Sodium hydroxide (a very powerful base) combines with carbon dioxide to form sodium bicarbonate - a harmless substance. This is fizz water. Scotch and Soda. But what happens when you add large quantities of this bicarbonate to an acid environment, like we have in this area? The carbon dioxide is released back into the air. It can also stay in the water as water can hold a lot more carbon dioxide than air. Increasing the carbon dioxide concentration in the water can inhibit breathing and kill animals. The alkali remains and the pH of the water goes up. This is why we saw high pH at our beaches and even at Perdido Pass in Alabama where the pH measured 8.1 and 8.2 on an incoming tide.

I have been measuring the local streams and Perdido River for pH, carbon dioxide and sodium. IP is definitely dumping this sodium bicarbonate, which is crystal clear, into the head waters of Elevenmile Creek and maybe even into the Perdido River. This is messing up the pH of these waters. IP has no permit to do this and should be stopped. But who will do it? The environmental agencies? I doubt it.

See what happens in 2020! See you next year.

### 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 \$20.00 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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