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Tidings

 The Newsletter of the Friends of Perdido Bay

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www.friendsofperdidobay.com

We Hope You are O.K.

The Perdido Bay area sustained some of the heaviest rainfall in the downpour of April 29th and 30th. The water in the bay was nearly as high as it had been in Hurricane Ivan. With such a small mouth, water can not drain very well. The water just backs up, filing swamps, small streams, and surrounding wetlands. We hope your house was high enough to not have any damage. We know that many boat docks were under water. Many roads and culverts which drain to the bay were either breached or washed out entirely. The culvert under Hwy. 98 leading to the Lillian Bridge was washed away along with part of Hwy 98. Florida's boat ramp on Heron Bayou was washed away along with part of the access road (Dog Track Road). Guess we will just have to use Alabama's boat ramp until Florida's is fixed. Several dams broke on tributaries to Perdido Bay and flooded homes in the process. Crescent Lake in west Pensacola which feeds into Bayou Marcus Creek and Perdido Bay, was drained when the earthen berm broke. Very serious flooding occurred in the Bristol Park subdivision along Elevenmile Creek when International Paper's storm water impoundment was destroyed. Many homes along creeks in Elberta were flooded. In short, a lot of water, dirt, and debris washed into Perdido Bay from the flooding. If you are boating in upper Perdido Bay, watch for trees which have become snagged on the bottom. I noticed one thing about the local Bayou (Heron) close to where we live - the mouth had been enlarged by the rushing water. A lot of sediment which had built up around the mouth, had been flushed out. In short, Perdido Bay and surrounding wetlands experienced a lot of flooding and flushing.

It probably was not safe to swim immediately and several days after the flood. Animal fecal material from farms, forests and yards washes into surrounding water causing increased coliform bacteria. The flooding and hard rains also bring a lot of chemicals which otherwise would not be present. But by Mother's Day weekend (about a week and a half after the flood), I decided to go swimming. Even though the water was dark and turbid, it was refreshing. The water was fresh (not salty), as it has been all spring. A bacterial sample taken on Mother's Day turned out to have lower bacterial counts than most other monthly samples. Apparently the

paper mill's effluent was getting diluted sufficiently so that bacteria were not living on the high organic matter.

How About IP's Ponds?

I was curious about International Papers wetlands which are just west of Elevenmile Creek in the Upper Perdido Bay watershed. Several days after the flood, I flew over the wetlands in a small plane. All the berms looked intact, although the berms are certainly not very high. These berms are only meant to keep the water from making channels in the wetlands and not to retain much water. The IP wetlands got flushed out well, which will help improve their performance as any nutrients which were adsorbed onto soil particles are now probably in the bay or maybe even the Gulf. After viewing the wetlands, we flew up and looked at IP's treatment ponds. The striking feature - their one big treatment pond (called aeration stabilization) had very weak aeration. Supposedly, IP is running 100 hp aerators, however the churning of the water does not appear to be nearly as great as it should be. This would definitely affect their treatment ability, and save IP a lot of money in energy costs. Another obvious feature of the treatment area is the large amount of boiler ash. Apparently, IP is still trucking this ash to the Escambia landfill where they are disposing of it for free.

IP's stormwater ponds were all filled up. The earthen berm which holds stormwater before emptying into Elevenmile Creek had



blown out. This blow-out had caused major and life-threatening damage to a subdivision down stream on Elevenmile Creek.

This is a picture of IP's large treatment pond called aeration stabilization basin.

A Dissenting Opinion

Just as any argument has another side, so does the causation between increasing carbon dioxide and global warming have a different explanation. In the last newsletter, we ran an article about the sea levels rising due to the increasing atmospheric CO₂. We got another opinion from one of our members - the Ginns from Lillian, AL. I decided to print parts of their letter in this newsletter. To quote from their letter - "...We do not believe that CO₂ is causing global climate change. This is very political - Al Gore has made a great deal of money pushing this agenda. In the 1970's we were all going to freeze to death and now these people are telling us we are going to suffer from the heat.

The sun controls our weather causing hurricanes, droughts, floods, extreme or normal heat and extreme or normal cold. But - who knows what is really normal. My friend had a beach house in Cape May, NJ in the 30's. It's way out in the water now, but my brother's place in Red Bank, NJ has tons more beach. Every hurricane takes sand from southern NJ and dumps it on the shore in northern, NJ. Greenland was once a great farmland for the Vikings. It is now a desert of ice. We don't think the Vikings were polluting with CO₂. We have fossils from fern trees that grew in St. Clair, PA many centuries ago, which meant that this area was extremely warm. These trees could not grow there now - it's too cold!

Yes, China's environment is bad. They pollute their own environment - not with CO₂ but with chemicals, toxins and ash, etc.” End of quote. The Ginns believe that it is the SUN which is causing our climate to change.

This is certainly not the prevailing scientific explanation for the weather changes which are occurring now. However, we do know that the sun does have an impact on our weather. Also accepting science without actually studying the data, is a little dangerous. We know on Perdido Bay, how faulty science has falsified the picture completely. So who knows?

Science With an Agenda

For me, our experiences with fighting a paper mill on our bay has been a complete re-education. I always thought that science was looking for the “truth” and that scientists were trying to be completely objective. This is hardly the science I found on Perdido Bay. The science I found on Perdido Bay was totally politicalized. Beginning in 1986 when my husband and I got involved with the fight for a cleaner Perdido Bay, I have been exposed to a totally different type of science . It is a science with an agenda where the good science is repressed and the false science is accentuated. Prior to 1986, I had been doing studies on the snails and clams which lived in Perdido Bay. The bay bottom where we live, was literally paved with the estuarine clam, *Rangia*. Hundreds of small estuarine snails, *Neritina*, grazed on the fronds of sea grasses and concrete structures which appear at our beach. None of these animals are here today. The environmental agencies no longer do biological testing in Perdido Bay. There is some limited water quality testing, but it doesn't show much. It is a “we don't want to know” picture.

In 1986, the EPA was doing a large study on Perdido Bay for then-to-be-issued Champion permit. They found some very damaging data concerning paper mill effluent. For one, while wastewater from domestic wastewater treatment plants is usually nearly completely degraded after five days, paper mill effluent is slowly degraded by bacteria. After 100 days, paper mill effluent is still being degraded and the oxygen is still being used up. What this means is that the BOD measured after five days is only measuring one-tenth of oxygen consuming capabilities of paper mill effluent. The true damage of paper mill effluent using a five-day BOD was totally underestimated. The EPA also found that Perdido Bay sediments contained certain heavy metals in high concentrations and that animal diversity in Perdido Bay was low. This EPA data was never published in final form and all graphs are stamped with “Preliminary-Subject to Revision”. There is no written interpretation. The study was never completed. . One of the EPA scientist who came to our environmental meeting and declared the bay “dead” was transferred out of the area.

Another study which was commissioned by the EPA, looked at the toxicity of sediments in the Gulf of Mexico. Bays were ranked by the level of toxicity in the sediments. Turns out that Perdido Bay's sediments were second most toxic, just behind the Houston Ship Channel. When we sought to publicize this information, we got a call from the consultant doing the study. There was a mistake in the data. We didn't really believe it.

One fairly honest study which did get published was a Florida-Alabama study of the sources of pollution into Perdido Bay (1989 to 1991). The object of this study was to look at the entire watershed and determine the sources of pollution. Well, there were no surprises from this study. The researchers found that while Elevenmile Creek contributed a small amount of water, it contributed 50 % of the carbonaceous material which quickly used up the oxygen in Perdido Bay. While the paper mill was not identified per se, its presence in the creek was obvious. The researchers were unable to identify any other major sources of pollution into Perdido Bay, because the contribution from the paper mill masked all other sources.

And then we had 17 years of the “Livingston Study”. Livingston was paid by the paper mill even though I am sure he hoped that the cryptic nature of his consulting name, “EP & A”,

would throw people off. In the early years of the Livingston study (1988 to 1991), Livingston kept asserting that the problems in Perdido Bay were coming from the Gulf of Mexico. This was implausible and the DEP biologists easily refuted it with a few water samples. Livingston published a book based on his study in Perdido Bay. The book and all the science which came out of the Livingston study in later years, assumed that the major problems in Perdido Bay were caused by excessive nutrients (nitrogen and phosphorous) put out by paper mill. These excessive nutrients caused toxic algae blooms which caused life in the bay to decline. To me, this was an absurd explanation. One, paper mills add nutrients to their treatment to ponds to break down the organic material. So if there are too many nutrients, just stop adding so many. Two, I have seen many toxic algae blooms in my life, and what was occurring in Perdido Bay did not look like a toxic algae bloom. What was so interesting was - Livingston did report finding species of toxic algae in his samples. I had to conclude that either someone was putting species of toxic algae into the bay or else Livingston was lying. To this day, I do not know.

What I do know, is that after 1995 I was not able to get small algae (periphyton) to grow on glass plates in experiments that I had been conducting in Perdido Bay. Grassbeds which had been growing profusely at our beach suddenly declined. In 2000, all vegetation, including a very large grassbed which had been growing for at least 30 years at Grassy Point in Alabama, disappeared. This was not toxic algae, but some chemical which was acting as a potent herbicide. I suspected the chemical was the new bleaching chemical (chlorine dioxide made from chlorate) which the paper mill began using in 1995, the same year I noticed a decline in the growth of periphyton. EPA and DEP both gave their "blessing" to this new chemical. Livingston's research was just a cover-up for the herbicidal properties of this chemical. And today, Perdido Bay is still impacted severely by these chemicals and the slanted science.

Don't Hold Your Breath.

Congress passed the Restore Act to give money from fines paid by BP for the oil spill to communities most affected by the oil spill. The sums which are projected from fines are enormous. Communities along the Gulf Coast have been very busy devising plans on how to spend this money and how to select projects getting this money. It has been four years since the oil spill and the court has yet to settle on the fines. One big problem - BP and the government can't agree on how many barrels of oil were spilled. How long did it take for fines to finally be assessed in the Exxon spill? Twenty-five years? This BP money could be awhile in arriving.

<p>Membership and Renewals</p> <p>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.</p> <p>Membership is \$10.00 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.</p> <p>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.</p>	<p><input type="checkbox"/> New</p> <p><input type="checkbox"/> Renewal</p> <p>Amt. Enclosed \$ _____</p> <p>_____</p> <p>Name</p> <p>_____</p> <p>Address</p> <p>_____</p> <p>Phone (_____) _____</p> <p>e-mail _____</p>
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