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Re; LOWWP DEIR

In the Spring of 2002, the CCRWQCB released a report entitled Frequently Asked Questions Regarding Water Quality Issues in the Los Osos Community. Just Prior to the summary it states, "This prohibition zone will remain in place until a viable solution and waste water project is implemented: a solution which ***protects and restores the quality of Los Osos ground water basin and Morro Bay Estuary.*** I content that your proposals in this DEIR do not accomplish this.

In the Spring of 2006 I purchased my home in the Redfield Woods neighborhood of Los Osos with a clean title. 10 months later I received a NOV from the CCRWQCB, with threatened potential fines of 40 million dollars. Under these dire circumstances, I, as a lay person, in order to try to save my home for myself and my children, began to educate myself on the issues and to speak publically and on the record since the fall of 2007.

18 months ago I maintained, and continue to maintain, on the record at the weekly Board of Supervisor meetings, that we were being coerced into installing a centralized gravity system which would force a great percentage of the community out of their homes, due to the high cost (initial and life time), and which would not fix the nitrate problem but could increase it. I have also argued against the use of Broderson as a recharge site due to the risks out weighing any presumed benefits.

The CCRWQCB has water quality tests for Los Osos going back to 1969. From then until now, nitrate levels have remained fairly constant regardless of the fact that the population has dramatically increased. As of 2006, when the last Cleath & Associate tests were run, they showed the average nitrate level to be at 10.5 percent, one half a percent over drinking water standards. Since the levels had been steadily decreasing, once the wells had been properly sealed, (a chronic problem through out the years- and by the way, the well at Broderson is still unsealed...), we repeatedly asked to have them retested but were denied, presumably because current tests would show us within drinking level standards thus negating the need for a centralized sewer system. In fact, there is data showing that our septics are not the cause of the nitrate pollution and there are internal County memos stating that installing a centralized waste treatment facility will not change the nitrate levels as this DEIR is assuming it will.

So this begs the questions; Why centralized? Why gravity? And why Broderson.
All three have been pushed for heavily by certain members of the CCRWQCB and SLO County. These options come with considerable cost and dubious positive results and mean while **sustainable options are being ignored**. I do not believe you have done your due diligence.

Carollo's Carnation, Washington project's EIR has the opposite conclusion, in regard to gravity and vacuum collection, as was found with the Los Osos project. Why? In Los Osos there is even more reason to choose vacuum over gravity then there is in the Carnation project. Your argument that vacuum requires more energy then vacuum is illogical. Here, a vacuum project would require 3 lift stations where as a gravity plan requires 20. Mark Hutchinson has repeatedly stated, on the record, that all collection options would be looked at, yet vacuum was not carried through from Carrollo's original report.

Our Los Osos sands are highly unique and unpredictable further complicating maters. The sand can be hydrophobic and contain clay lenses and lamellae,(see Baywood fine sands at http/soils.usda.gov), which effect percolation. According to Cal Poly soil scientists Larry Raio and Tom Ruehr, and as indicated in the 1997 supplemental EIR, sometimes the water percolates downward, sometimes sideways and sometimes they can hold water in underground clay pond like structures which will make it far more likely to hit water when digging deep gravity trenches.

Gravity pipes are not sealed and by nature leak. This is an accepted industry fact. There is an "allowable" leakage rate in which a test section shall not exceed 500 gallons per mile, per 24 hours, per inch diameter of pipe tested at the five foot test head. That's a whole lot of poo. Industry averages show that 5% of the raw sewage running through gravity pipes leaks out on a continual basis. This does not protect our ground water as prescribed by the CCRWQCB, it causes harm. Unlike sealed low pressure systems ,which do not leak, or septic tanks which act as primary treatment facilities, gravity pipes will be leaking raw sewage directly into our ground. This is blatant pollution. What does not percolate into the upper aquifer will flow horizontally into the protected marine sanctuary, again violating CCRWQCB rule..

These certain leaks will also quickly erode the sandy support beneath large gravity pipes, causing them to bow, thus further increasing the pressure upon the joints which could easily give way. This creates not only harmful discharge but also the ability for water to infiltrate the system. Is this why your numbers for the waste water facility are so large? Are you anticipating massive infiltration or is that for build out and beyond?

Either way there is a problem. Vacuum or STEP/STEG , which are both sealed, low pressure systems, would solve your I/I and exfiltration issues. They are also faster, cheaper and less intrusive to install. I believe you have underestimated your costs for sealed gravity pipes. Their material cost **and** installation costs are much greater. Is that to be factored in later as change orders? Where is the additional cost for de-watering trenches for gravity installation? Because of the unique Baywood sand and clay shales in our area, you will hit ground water more than you would under normal circumstances.

This water will also need to be cleaned before it can be disposed of. Small diameter pipes and directional boring or small trenching is much less expensive and time consuming than attempting to install large welded gravity pipes into deep shored trenches. Such gravity installation would not only increase cost but it will also increase air pollution as large cranes and welding equipment and much more time would be needed to complete the job.

If the increased size of the treatment plant is not due to I/I but you are planning for build out, this violates 218 law. You can not build anything of general benefit and you can not assume that the vacant lot owners will pass the next 218. Why should they? They, unlike us, do not have the threat of astronomical fines hanging over their heads and they do not have a guarantee of available water. We could be in a level three water severity for quite some time. (Under the proposals in this DEIR, that is highly probable) Since there is no guarantee that the vacant lot owners will ever be able to develop their properties with in the Prohibition Zone why should they assess themselves for $25,000? In our 218 vote, we were all under the threat of losing our homes if we did not vote yes. Under our conditions, 30 percent of the population did not vote at all and of the remaining **residents**, (those who are not government, schools or businesses), 56% voted yes and 44% no. This 80% 20% figure you keep using is misleading and Paavo Ogren is on record at a Board of Supervisors meeting confirming the 56% 44% numbers.

Your current disposal, (which should be **RE-USE**), option throws most of our water, (a precious and dwindling global resource), into the wind outside of our water basin. I wonder how the National Resource Defense Council would view that? Because it is uncertain if Broderson will percolate downward and could flow into the Morro Bay protected marine sanctuary,(according to Cal Poly Soil Scientists Larry Raio, Tom Ruehr and 1997 Supplemental EIR) this will not aid in recharge nor halt salt water intrusion. Again, according to Cal Poly Soil Scientists, Larry Raio, Tom Ruehr and the findings of the 1997 supplemental EIR, Broderson may result in daylighting of the discharged treated effluent and will create an increase for liquefaction. Paavo Ogren has also repeatedly stated, on the record, that Broderson may not work. That it will be monitored and abandoned if it does not.

Unfortunately, monitoring may not be enough and finding out that it isn't working may come too late. Due to the soil conditions, (lamellae), liquefaction conditions are probable, (1997 supplemental EIR), and as soon as we have any sort of an earth quake, the neighborhood of Redfield Woods, along with our Emergency Services Department (they are also located here and were damaged in the last quake) could slide. Gas mains could rupture, causing fires, and deep trenched, large gravity pipes are far more likely to break then small diameter low pressure pipes located near the surface. Because Los Osos is in a high risk area, due to the many fault lines, you put the neighborhood of Redfield woods at an unnecessary risk for a component of the project that may not even have any benefits. If it goes wrong, there could be landslides, large property damage and deaths and you will be sued. Also using Broderson, unfairly puts those residents in a situation where it would behoove them to acquire earthquake insurance, further increasing their monthly costs.

By putting the treated effluent up on Broderson, you are reintroducing emerging contaminants and endocrine disputers which you have just removed. These harmful elements will either seep into the aquifers or out to the bay, either way, violating CCRWQCB rule and common sense!

You do not put effluent in drinking water, that is why ocean outfall is practiced.
Whereas ocean outfall may not pollute drinking water, it is wasteful, therefore ag exchange should be utilized and could be easily accomplished with real due diligence or a few phone calls.

Once all of the septics are taken off line, more than a million gallons of water per day will be removed from the Los Osos ground. This will have an adverse effect on the plants that grow here. As they die, habitat will be destroyed and loss of animals will follow. From the Morro Bay banded snail to top predatory birds, all creatures will be effected adversely. Lose of plant life will also increase drought conditions which are already expected to worsen due global warming and this unnecessary lose of plants life itself will further exacerbate climate change. Non of this is helpful in regards to AB32.

This vicious cycle will also increase salt water intrusion. As we dry up the land, by removing septic recharge and plant life, additional recharge by precipitation, (which is expected to decrease due to global warming), will become less effective. As our upper aquifer diminishes, (all on its own, with out us pumping one drop), sea level rise, due to global warming, will further increase salt water intrusion. According to the 1997 supplemental EIR and expert testimony by soil scientist Reuhr and Raio, the use of Broderson will not mitigate these factors.

Your conservation element, which is your salt water intrusion mediation, is way too little, way too late. Why should it only involve ½ of the town when we are all dependant upon the same water which is all at a level three water severity. I don't think you have enough money allocated to even replace the toilets in the PZ and how can you know? There has never been a study. In the past year, not only has their been virtually no information disseminated to the public about waste water systems, you have also not asked the residents anything, (I am not counting the STEP survey debacle) Is their any real data on the PZ? How many people have low flow fixtures? How about their median house hold income? The last census was in 2001 and it was for all of Los Osos. I was unaware that an EIR could be based upon assumption, guess work and hope.

Why should we buy 600 plus acres when we need less than a tenth of that for a treatment facility?
Are we to become the sludge facility for the County? And why would we pay 25 million for secondary treatment, which would create abundant sludge, when we could have tertiary ponds for 13 million or bio membrane tertiary treatment for 9 million with minimal to no sludge? Why was Carrollo's re-use element for their Petaluma project not examined for use here? How about Ag exchange? Why has that not been investigated? There are plenty of farmers locally who would gladly use our treated effluent instead of pumping from wells. We have contacted them. We have also come up with sound plans for balancing the basin, through a real conservation plan and have been ignored. Why? All of this; conservation plans, ag exchange, inexpensive tertiary treatment options, inexpensive and environmentally sound vacuum collection, STEG cluster systems, have all been submitted to the County. Where are they?

Now the County wants to augment the design build process and the wording of the RFQ is so limiting that few ,if any bidders, outside of Montgomery Watson Harza, remain. It is time for you to lay out all reasonable, sustainable options on the table fairly and openly and stop stacking the deck in favor of Montgomery Watson Harza's gravity plan which was thrown out in 2005.

I contend that AB2701 puts you in a position to address our salt water intrusion problems which were greatly exacerbated when the County built 1,100 in the 1980's during a building moratorium. The County should be seen as having a fiduciary duty regarding Los Osos and not be creating a situation to exploit our community and it's resources. By creating the most expensive waste water project in this Country's history, the County sets itself up to make a hefty commission. By installing a collection system which inherently leaks, Los Osos could be subject to more fines by the CCRWQCB and is put in a situation where there will be immediate costs for repair/upgrade. This includes your treatment design. Words like coercion, collusion, and constructive fraud could be bandied about. For everyone's benefit, lets get this right the first time because as it stands now, your current proposal is not only unsustainable it's harmful.

I do not believe that the County has preformed its due diligence in examining collection, treatment nor ***re-use***, (*disposal* should, at this juncture in our history, be illegal). In conclusion, your DEIR is incomplete and flawed, not to mention extremely cumbersome. The assertions I have made in this document have also been made at Board of Supervisors meetings over the past 18 months. I have them all in writing and they are all on record in the BOS archives. Any questions I have asked in the past have been ignored. I look forward to your response.

Piper Reilly
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