

LaCaro, David@Waterboards

From: Linde Owen <lindeowen@sbcglobal.net>
Sent: Monday, July 16, 2012 2:32 PM
To: LaCaro, David@Waterboards
Subject: Comments on SLO County Dewatering and Re-use of Los Osos Basin water

Dear Mr. LaCaro and Water Board members and staff,

Please accept my comments and concern on the 7/13/2012 Draft staff report on the status of Los osos Water Recycling Facility Construction. The Porter Cologne Act gives you power to oversee and correct the flaws in the current sewer project.

- Under the Porter-Cologne Water Quality Control Act (Porter-Cologne), the State Water Resources Control Board (State Board) has the ultimate authority over State water rights and water quality policy. However, Porter-Cologne also establishes nine Regional Water Quality Control Boards (Regional Boards) to oversee water quality on a day-to-day basis at the local/regional level.
- Regional Boards engage in a number of water quality functions in their respective regions. One of the most important is preparing and periodically updating Basin Plans,(water quality control plans). Each Basin Plan establishes:
 - 1) beneficial uses of water designated for each water body to be protected;
 - 2) water quality standards, known as water quality objectives, for both surface water and groundwater; and
 - 3) actions necessary to maintain these standards in order to control non-point and point sources of pollution to the State's waters.

Permits issued to control pollution (i.e. waste-discharge requirements and NPDES [see below] permits) must implement Basin Plan requirements (i.e. water quality standards), taking into consideration beneficial uses to be protected.

Dewatering.

The estimated removal of 7 million gallons a day during deep trenching in high groundwater areas for a steady 24/7 during 6 months (an approximate) is of concern. Disposal suggestions include discharge to the Bay. Broderon disposal and TriW disposal of this daily stream is complex and cost prohibitive in comparison and will likely be abandoned due to timing logistics and contractor cost cutting. The upper aquifer is our back-up supply.

The 8 acre Broderon Leachfield plan now appears to at best, put water back into the lower basin (an estimated 7-15 year process) which will be invaded with the Sea Water Intrusion plume if not already, according to current advancing SWI data. That water will never serve as re-use if it disposes into the tainted plume. It will also waste the estimated 700,000 gallons a day of treated effluent planned for the project.

TriW has been re-graded and reconfigured as a 'basin'. Only it is not a basin, it has no containment feature at the bottom end of the 11 acres. Instead it appears to assume that stormwater will percolate before it reaches the end. Will 7 million gallons a day percolate during Dewatering? The estimate of the site being able to take 32 million gallons of stormwater runoff is untested and the area did not appear to perc after rain events while it was disturbed after the CSD project. The steady disposal of 21 million gallons per month of Dewatering is a gamble at best. Dumping it into the Bay is criminal.

Action: Require the project to use directionally bored Vacuum or STEP for all high groundwater areas to avoid trenching and the Dewatering loss of our upper water supply.

Recycled Water Management Plan

The County has a conflict of interest with the Water Re-use Plan and has made no attempt to be creative or diligent in the re-use and conservation portion of the Project design. They have Nacimiento water to sell and a desire for a larger Build-out than a sustainable Basin can provide. There has always been a back-up plan to sell 560 afy to Los Osos, should we need it. The pipeline alone is an additional \$36 Million and the mercury contaminated water needs a treatment plant.

The original County plan was to export our treated wastewater to an adjacent Basin, the infamous Tonnini Sprayfield plan. After 2 years of dispute (and \$2 Million cost) the Planning Commission forced the County to consider Ag re-use and other disposal methods to re-use ALL the treated water. Conservation was also a huge component to protecting our supply.

The current re-use disposal at Broderson, as mentioned above, appears to be obsolete if the water will be lost to the Seawater Invasion plume. The site has always been controversial, fears that it will cause liquifaction to properties below, that the water will re-surface along the Bay (requiring harvest wells), and that it may not be able to take the volume proposed. When asked what the County would do if the Broderson Leachfields failed, Mr. Paavo Ogren stated that 'they'd have to figure something else out'. Finding a new location for the estimated 700,000 gallons a day is not an option, especially when there aren't enough current locations to put the remaining 300,000/day.

The large irrigated Ag farms are not interested in the treated water, the Cemetery doesn't appear thrilled about taking it, the schools who have agreed to take it are cutting back on turf already. Contracts with 6 Dry Land farmers can be cancelled after the pipes are put in, should they not need it. There is no real Ag re-use plan. It does not appear that much incentive has been offered.

Action: First, consider allowing a PHASED Collection of the low-lying areas. Nitrate levels are likely within drinking water standards (the County has refused to do the quarterly nitrate tests for over 7 years now... no current info as to the nitrate level, which was lowering) and purveyors are preparing to denitrify and do blending of the upper aquifer anyway. Collecting low lying areas in a Phased design could best protect the Basin by addressing the worst problem areas and not having to dispose of so much treated wastewater when there are so many disposal and re-use questions. Resolution 83-12 (Septic Management Program) can apply to the Phase 2 areas. The Prohibition Zone is established and a Phased collection would be financed by all.

If this is not a possible consideration, SloGreen Build is looking at an option for re-use disposal thru a purple pipe system along Highland Drive that could feed treated water into the abandoned septic systems via gravity piping. The expense would be equivalent to the construction and maintenance of the Broderson leachfield plan, but put water back into thousands of sites capable of mimicking the past disposal. Another reasonable possibility would be to put injection wells alongside the Creek Compartment near the treatment plant, where natural infiltration to the lower basin occurs.

The County's Conservation Plan (\$5 Million) is painfully lacking in correct data and implementation. The lack of concern for stopping Salt Water Intrusion by not getting conservation efforts underway is disturbing.

Septic Tank Decommissioning

The Plan for decommissioning the 4,774 septic tanks is inadequate and a dumping site has not been secured. The impact on landscaping is unknown but will likely damage trees and shrubbery that are dependent on this supply. Homeowners bear the cost of decommissioning and SloGreen Build ideas will be expensive to implement should they be re-used for stormwater collection.

Action: Again, a PHASED collection system with a Septic Management Plan could take the cost and complexity of disposal and decommissioning by only decommissioning the high groundwater areas and providing that service as part of the project. The Ripley STEP collection Plan was less expensive than the Gravity collection and avoided many of the problems of septage disposal by including them in the treatment stream.

Seawater Intrusion

Seawater Intrusion has been a concern for over 25 years, yet little has been done to address the damage to our lower basin quality and quantity supply. The ISJ negotiations appear to be spending more time talking about moving wells inland than to limit the amount purveyor wells remove. The County was slow in giving Los Osos a Level 3 Severity rating. Most citizens in Los Osos haven't a clue that we are in a water crisis.

Action: Get an outside review or look at the Los Osos Sustainability Group's outside analysis to get a clear picture of the severity and implement an immediate lowering of the withdrawal from the lower basin by treating the upper aquifer and providing the PHASED collection effluent to farmers with a higher treatment level (ponding and similar BOS settlement technologies). Get all \$5 Million set aside for Conservation into immediate use!

Thankyou for considering my thoughts and concerns.

The County's 7 years of choosing this mega sewer (over more appropriate and affordable technology) appears to have planned an end contract with Los Osos to take their undersold Nacimiento Project water, allowing the Build-out (which isn't currently feasible). The Porter Cologne Act prohibits the creation of a problem in order to remedy it. I hope your Board will give serious thought to the conflict of interest that looks to waste our current, barely sustainable supply.

Sincerely, Linde Owen
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Is there some chance to save the Broderson forest? if you don't know it you should. Maybe you could help save it.

It's just that the County's plan to an obsolete disposal site that will, if it is even successful, put water back into the salt water plume... worse than obsolete is that we won't be retrieving that water for re-use. And will pay to cut down another ancient historic grove of majesty trees that are a community asset and feature. All for nothing in the end. Just a permanent \$10,000 year maintenance contract to save more of the Dune Scrub habitat where a 25 acre established diverse forest and its beings once lived. One of the best kept secrets of Los Osos, truly. Even neglected and abused the 100 yr old canopy is awe-inspiring and spirited with stories of a hundred years. The trails are shared by walkers, runners, people w/dogs and horses. Locals and visitors alike use this 'forest' that's almost a hundred years old for recreation and sacred time. It has prescriptive rights.

There are other ways to get the 800,000 gallons a day into some lower aquifer re-charge that might work. BUT, no. The Geo-Hydro-Technical studies are based on old basin data. Sea Water Intrusion has been moving at 7 times faster than predicted in the old studies. Disposal into Broderson leachfields is expensive, cuts out a major large tree habitat, is sketchy about re-establishing trails, requires every five year replacement (and revegetation). There are currently 4 local failing native plant restoration projects at least.

What's the point? In 2003 it seemed viable to dump a million gallons a day up there. Regurgitated and copy/paste style data gathering has simply hidden the fact that this disposal water will be **TOTALLY WASTED** if it even works. It will only enter a damaged part of the lower aquifer. The proposed 800,000 gallons of treated disposal water will not be available for re-use ever again. If it even works. Dumping that much water above a clay lens has many complications below. The neighboring community is clueless as to the tree removal.

Late in the game this is still a gamble we can't make. Go there. Walk from Alexander or Broderson off of Highland, trails lead in both directions to two vertical stands of very old Cypress and lots of amazing Eucs, it all opens onto the greenbelt and hills above.