

July 3, 2012

California Regional Water Quality Control Board
895 Aerovista Place-Suite 101
San Luis Obispo, CA 93401-7906

Subject: Comments on June 13, 2012 Draft Staff Report Regarding Status of Los Osos Water Recycling Facility Construction Project, San Luis Obispo County

Dear Mr. LaCaro:

Thank you for the opportunity to comment on the above referenced staff report. We look forward to your meeting of September 6, 2012 in San Luis Obispo where the community can speak to the Los Osos Water Recycling Facility Construction Project (Project). We would like to provide comment specifically to the subjects the Water Board Subcommittee is considering.

1. Recycled water, including the status of water reuse areas.
2. The role of a) recycled water from the wastewater treatment plant and b) conservation, in correcting seawater intrusion.
3. Construction dewatering issues.

Please provide copies of this correspondence to Dr. Hunter and Dr. Wolf as part of the consideration of these very important matters. We are eager to receive their report as well.

Dewatering

The County Public Works Department has characterized the dewatering water as "trash water, which is seeping to the bay anyway." This water, also known as "first water," is what has been recharging the upper aquifer/drinking supply. In a "Catch 22" conundrum the dewatering water cannot be characterized as "trash" when it is the primary source of recharge into the upper aquifer. This water is considered a "new source of supply" by the Interlocutory Stipulated Judgment (ISJ) partners. As an example, the primary ISJ participants, LOCSD and GSWC, are currently proposing upper aquifer well head treatment through ion exchange for use in domestic supplies in the very near term (development permits are pending).

The County's conceptual dewatering plan approved by the California Coastal Commission's Coastal Development Permit (CDP) agrees to use the Tri-W site for dewatering. The plan prohibits the use after June 2014 and is not allowed during participation events. The County claims the Tri-W site has an estimated 32 million gallon capacity per day to collect stormwater runoff from the watershed (365 acres). The County suggests that the Tri-W site will only be used at 22% of that capacity or 7 million gallons per day. Dewatering water not placed at Tri-W (or Broderson) would be "treated to the applicable standards developed by the RWQCB and discharged into the Bay."

Recommendation:

We ask that the RWQCB deny any discharge into Morro Bay, a National Estuary and a recognized State Marine Reserve. Discharge to the bay wastes water.

Recycled Water Management Plan

Urban Reuse:

The approach taken by the County, from the beginning, going back to 2007 is not about how do we beneficially reuse treated effluent to maximize seawater intrusion mitigation, but instead, how do we ensure that we can lose all of the treated effluent generated by the facility.

Consequently, the Recycled Water Management Plan should be about seawater intrusion (SWI) mitigation in a cost effective manner for the Prohibition Zone paying customers (as stated in the County's Project Mission Statement, see page 3, 1.3 Draft RWMP). Most noteworthy in the context of the urban and agricultural reuse plans is, who is participating and who is not. Irrigated agriculture in the Los Osos Valley is not participating in the ag-reuse program. Neither are the two largest turf areas in Los Osos (cemetery and Sea Pines Golf Course) contracting to receive treated wastewater.

There is no cost comparison between using upper aquifer (nitrate rich) water for irrigation at community schools and park using small onsite wells, in contrast to the construction of new delivery infrastructure (purple pipe).

Four schools; specifically, Monarch Grove Elementary (1-2 acres of turf) turf area sits above a geological clay lense and is also used a retention basin for run-off; this lawn is nearly always wet and needs less irrigation than proposed. Sunnyside and Baywood Elementary's (1.5 acres of turf), and Los Osos Middle School (11 acres of turf) would again, be ideal for upper aquifer wells. The total acres of turf at local schools is about 15 and in a marine climate should consume 2 AFY per acre or 30AFY. The wastewater project cost to deliver 30AFY is extremely expensive on a per acre foot basis; this form over substance approach to recycled water is a theme the County follows closely in ag-reuse, conservation plan, etc.

As a side note, there are risks associated with wastewater use on school turf that have not been analyzed. Los Osos weather is foggy and evaporation is a key component for use of treated wastewater on school and park turf. Irrigation is required to take place at night to avoid human contact; evaporation is expected in the morning hours, before play time. However in our climate zone, Los Osos turf

remains wet well into the afternoon. Fog lifts late in the day and evaporation may not take place if the ambient air temperature is low, like most coastal communities.

Recommendations:

Upper aquifer wells used for school turf irrigation. Provide incentives to attract the cemetery to receive recycled water for turf irrigation.

Agricultural Reuse: Joe's v. Pro's

The premise regarding agricultural reuse is founded in what is also known as an ag-exchange program. Under such a program, agricultural irrigation needs are met with recycled water in lieu of groundwater extractions from ag wells. These extractions would otherwise compete with urban needs.

Irrigated agriculture in Los Osos Valley is not participating in the RWMP. The County with the "help" of the Resources Conservation District has interested six (6) parcels in receiving recycled water via preliminary participation agreements. It is unknown if any actual delivery contracts have been executed. Furthermore, of those who have expressed interest, only three parcels overly the "Creek Compartment" and only two parcels (Kostik and Goodwin) are significant potentials consumers of recycled water. The authors of these comments are aware of your analysis of the SWI mitigation benefits of the current PPA's and the participating properties. Our understanding of the analysis is that it confirms the limited SWI mitigation is achieved by the current ag-reuse plan.

Agricultural interests overlying the Los Osos Groundwater Basin that would be the most beneficial users to offset SWI are currently using high quality water and have plenty of it. They are not interested in the treated wastewater as it will require new infrastructure costs as well as regulatory compliance with the new Irrigated Ag Order adopted by the RWQCB.

While these may be feasible uses for the water, they are not appropriate if there is little to no seawater intrusion mitigation. Furthermore, they are not appropriate if the costs outweigh the benefit significantly and applications require large monetary subsidies.

Recommendations:

Require all agricultural reuse be delivered to existing irrigated agriculture overlying the Creek Compartment in Los Osos Valley.

Joes v. Pros photo attached for added emphasis.

Septic Tank Decommissioning

The County defers to an "Operations Plan" to be developed in the future to abandon 4,774 existing septic tanks including an estimated 5 million gallons of septage. The sole analysis of *"truck trips and fugitive dust for "filling in" the old septic tanks"* in the FEIR is inadequate. No analysis of timing, hauling, handling and treatment of this highly concentrated material has been conducted. As you are aware, only certain wastewater treatment facilities accept this material. We are unaware of any agreements with any facility to accept such high volumes over a very short time (6-12 months). The County suggests that *"residences could hook up to the new sewer and then pump and abandon their tanks at a somewhat later date"* if a facility is unable to accommodate large flows. This approach would defer decommissioning to sometime in the future adding additional costs to the already high price of the project.

SLO Green Build is developing a voluntary plan for homeowners to reuse their septic systems for alternative uses, i.e. filtration and percolation of storm water. This approach for decommissioning is not feasible for homes in high groundwater (approximately 15 percent of the community). Costs associated with rerouting rain gutters, if the home has them, may be prohibitive.

Reuse of septic systems for irrigation onsite would require expensive sanitizing of the tank, a pump, filter, electrical hook-up and conveyance to the properties landscape. In light of the high cost of the Project and its burden on homeowners, it is unlikely there will be much interest in anything but the least expensive approach to decommissioning ones septic system.

Recommendation:

Develop a plan to address decommissioning timing, hauling, handling and obtain agreements with treatment facilities willing and able to process such material in high volume at a rapid rate. Provide incentives for storm water percolation and/or onsite irrigation.

Los Osos Groundwater Basin Management

It is our understanding that the collaborative effort among the ISJ partners has broken down or at the very least been severely damaged by the County's bad faith negotiations with the San Luis Coastal Unified School District for the purchase of recycled water for four schools. This contract was entered into on March 20, 2012. The price agreed to for the recycled water is lower than the purveyors currently receive for revenue from these large users and is locked in for 5 years. Both LOCSD and GSWC are in the process of raising rates to cover expenses and implement infrastructure improvements associated with groundwater management. Without the guaranteed revenues both purveyors have to restructure their rate schedule which will pass on higher rates to the already burdened water rate payers.

It is unlikely the Los Osos Groundwater Management Plan will be released in this calendar year.

Recommendation:

Dissolve the ISJ. It is clear after years of inaction by the ISJ participants that the Courts are ill suited to provide leadership in connection with such resource considerations. GSWC has for many years coordinated and cooperated with the LOCSD and their predecessor CSA-9A. The only tangible benefit from the ISJ process has been a financial one to the consultants, namely Wallace and Cleath and various attorneys for the respective parties.

Seawater Intrusion

As longtime Los Osos residents who have followed the many years of sewer/water debate, we are very concerned regarding the further incursion of seawater into the lower zones of our groundwater basin. These lower zones (D&E) have historically provided the majority of the community's domestic supply for many years. Seawater intrusion was first documented in the lower zones around 1980. Intrusion into the upper zone was also identified in the mid 1980's.

With the repeated delays of the LOWWP, the seawater wedge has continued to displace lower zone freshwater storage capacity. It appears to be advancing at a rapidly increasing rate with fingers reaching the LOCSD Palisades well. The LOCSD continues to rely on this well as their largest producer. Has the ISJ process resulted in some agreement to get the LOCSD to eliminate or at least reduce extractions from this location?

The current LOWWP disposal plan intends to utilize the Broderson site for wintertime or wet weather disposal up to 448 AFY, urban and agricultural reuse are options being considered for the balance of the treated effluent during the summertime or dry weather. It is unclear if either of these options is feasible; but if so, one thing is reasonably clear; neither option affords any significant seawater intrusion mitigation. However, it is not the responsibility of the LOWWP to effectuate summertime or dry weather disposal, as that has been left to the ISJ working group. You prepared a memorandum on the subject to your board dated July 23, 2010.

The upper reaches of Los Osos Creek have long been considered a viable location for a scheduled release of treated effluent from a wastewater facility during the summertime when the creek is not "live". The lower basin is known to surface or "daylight" at the creek bottom south of Los Osos Valley Road. Approximately 350 AFY could be released between July and October which equates to 1.5 cubic feet per second. Most importantly, the model has not been run using a surface water discharge into the upper reaches of Los Osos Creek as had been contemplated by earlier iterations of the wastewater project.

Currently, the cornerstone of the pending Los Osos Groundwater Management Plan is a proposed shift in pumping from the lower groundwater basin to the upper confines. Presently, the ratio of 3:1, lower to upper would be reversed so that up to 75% of domestic supplies would be extracted from zone C and 25% from zones D&E. Given the primary source of zone C is septic returns from decades of over saturation, significant concerns relate to the quality of this water supply. Even with treatment for nitrates, which is expensive, emerging contaminants such as pharmaceuticals and surfactants present added health risks from consumption. Blending of the supplies was originally considered possible, but now it appears any blending scheme will not produce supplies that meet state requirements. Neither the LOCSO nor Golden State Water has viable blending projects on the foreseeable time horizon.

Recommendation:

Compel the LOCSO to reduce Palisades Well extractions. Construct a new water supply well overlying the Creek Compartment in zones C, D and E. Model a dry weather or summertime discharge in the upper reaches of Los Osos Creek. Do not assume a shift in pumping from lower to upper will result in a sustainable water supply.

Water Conservation

The LOCSO and County of SLO have relied on Maddaus for recommendations for residential water conservation. The report is a boiler plate suite of conservation options many of which are not feasible or applicable in the special circumstances that are Los Osos.

The most cost effective approaches to water conservation include the following:

1. Low flow toilets and showerheads. (1 gallon per flush toilets and 1.5 gpm showerheads are the state-of-the-art).
2. Energy Star clothes and dish washers are also large conservers.
3. Hot water recirculation pumps (relatively easy retrofit).

The Conservation Plan expects the homeowner to replace fixtures using rebates that do not cover the total cost. Dish washers are not covered under the County's rebate plan and washing machines will only receive a \$50 rebate. As a disadvantaged community, homeowners either are unable to afford new fixtures or are waiting (continuing to waste water/ causing SWI) for the project to replace their fixtures/appliances.

Recommendations:

Increase incentives. Include dishwashers. No more than 5% for administration. Prioritize plumbing fixture replacement as described above.

Other Issues

The LORWF contemplates a minimum ten percent (10%) of treated effluent for environmental purposes. The County is approaching this condition without regard to continuing SWI. Ten percent equates to approximately 80-90AFY. In other words, we could be further exacerbating the SWI deficit by a like amount on annual basis for an indefinite period with no tangible environmental benefit. An example of this is the discharge of 33 AFY within the Bayridge Estates subdivision in Los Osos. Tertiary treated effluent will be disposed of in an attempt to artificially sustain riparian habitat in Little Willow Creek. Where are they going to waste the other 50+AFY per year?

We believe many of the recommendations made above should be incorporated into the Master Reclamation Permit your Board will consider for the LORWF.

By the way, you may want to formally invite Supervisor Gibson to appear and comment at the September 6, 2012 meeting. As of last week, he was unaware of the scheduled proceedings.

Thank you for the opportunity to comment. We are available for any questions you may have. We would be happy to meet or are available by telephone to discuss and clarify any issues or recommendations.

Sincerely,

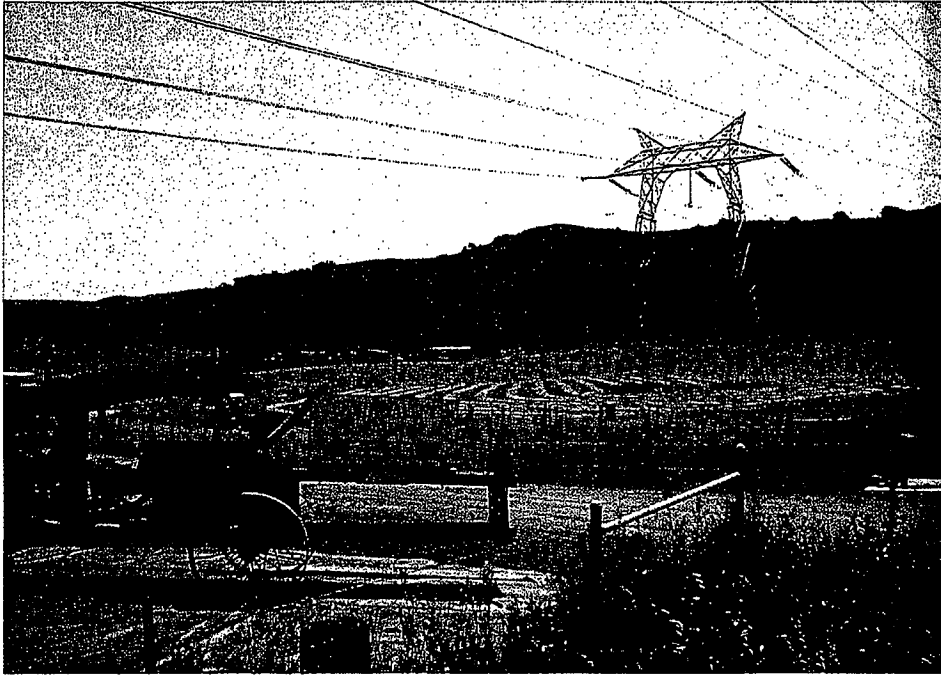
Jeff Edwards and Julie Tacker

PO Box 6070

Los Osos, CA 93412

805-235-0873

julietacker@charter.net



JOE'S vs PRO'S

Los Osos Valley Farmers

