



January 30, 2009

Morro Bay National Estuary Program Comments on the LOWWP DEIR

The Morro Bay National Estuary Program (MBNEP) supports the effort led by the County of San Luis Obispo to build a wastewater treatment system for Los Osos. A solution to the ongoing pollution of the aquifer is long overdue. The clear need to improve wastewater treatment in Los Osos was identified almost thirty years ago, and it was included as a priority in the Morro Bay National Estuary Program's Comprehensive Conservation and Management Plan when that plan was completed in 2000.

Construction and operation of a wastewater project is a major undertaking that will have both short and long term environmental impacts. The DEIR does a thorough job of identifying potential impacts and addressing those impacts through avoidance, minimization, and mitigation measures. Further measures to reduce impacts will likely follow from the permitting requirements as the project proceeds.

The similarities between the four 'top level' alternatives described in the DEIR greatly outweigh the differences between them in terms of environmental impact. This does not suggest that there are not important differences, nor that environmental considerations and CEQA should not be primary drivers of the final project. It does however provide the community and the Board of Supervisors with some flexibility to consider costs and community preferences without sacrificing environmental considerations.

Specific comments, questions, and suggestions on the DEIR follow. Thank you for your consideration and responses to these comments.

Sincerely,

A handwritten signature in cursive script that reads "Daniel Berman".

Daniel Berman
Program Director
Morro Bay National Estuary Program

1. **Tertiary Treatment.** The MBNEP suggests that the water that is returned to the community for disposal and reuse should receive tertiary treatment. The community needs to reuse as much of this water as possible to address a critical water shortage, and tertiary treatment expands the options for additional reuse now and in the future. The recharge of the aquifer via Broderson disposal may require tertiary treatment depending on future public health regulations and the legal distinction between 'disposal' and 'recharge'. It seems clear throughout the long history of the Broderson disposal option that recharge of the groundwater has always been the intended benefit.

Reuse of wastewater faces serious negative perceptions, and additional treatment will help address those concerns. Tertiary treatment also greatly improves the potential for exchange and reuse agreements with the agricultural community. The trade off is one of increased cost both for construction and operation, and of increased energy use. The DEIR should lay out those costs and benefits in greater detail rather than dismissing tertiary treatment as unnecessary.

2. **Spray fields** Spray fields should be seen as a short term necessity, but because of their negative impact on the groundwater resource problems in Los Osos, they should not be relied on as a long term approach. They also need careful design and ongoing management to prevent nutrient enrichment of the waterways.
 - a. The DEIR identifies much of the proposed spray field area as Cropley clay soils with low percolation rates. Calculations presented suggest that this will not be a problem, but field tests of actual percolation potential should be conducted through varying seasons to confirm the average rates provided in the DEIR. The experience of the landowner and adjacent landowners in managing irrigation and drainage issues should be solicited.
 - b. There are multiple seasonal drainages running through the proposed spray fields area. The DEIR describes buffers to avoid contributing effluent to these drainages, it would be helpful to see a clear figure and analysis showing those buffers in place and examining what effect they have on the spray field design. The required WDR will likely require such analysis; it might as well be done now. Some of these drainages currently show signs of erosion and lack of riparian vegetation. The project could improve riparian condition in these areas through erosion control and revegetation efforts as mitigation for impacts elsewhere.
 - c. The DEIR also describes altering the drainage of the area to collect and return any runoff from the spray fields. The goal of preventing such runoff from entering the creek system is valid, but the concept also raises concerns. Such a system will alter the current hydrology, and will collect

substantial precipitation during the wet season. It seems like it will need to allow wet season runoff to flow into the creeks, without concentrating it to an extent that will cause erosion. This should be addressed.

- d. The flood plain map (Appendix E, Fig 5.3-1) does not show any flooding out of the seasonal drainages that run through the Tonini property. This may be an artifact of the flood zone mapping more than a guarantee of no flooding. Discussions with the ranch owner and neighbors as well as visual inspection in the field should be pursued to investigate the likelihood of flooding from those drainages.
- e. The DEIR mentions landfill disposal of the grass grown under the spray fields. Is there a prohibition or concern about using this grass for cattle forage?

3. Visual Resources.

For the Tonini site especially, the construction of a major industrial facility in this beautiful, rural, agricultural area with the Morros as a backdrop is unfortunate. If this site is chosen, all efforts should be undertaken to minimize the visibility of the facility from Los Osos Valley Road as well as Turri Road in both the day and night (e.g. lighting). A photographic rendering for the Tonini site should be provided from multiple points on Turri Rd as well as the provided view from LOVR. The impact will be especially significant and difficult to mitigate from Turri Rd. driving towards LOVR. The photographic perspective provided in the Visual Resources Appendix for the Cemetery area sites should include a photo from westbound LOVR approaching the Cemetery in addition to the perpendicular angle provided. (similar to the angle provided for Tonini). From the information provided in the DEIR, it appears that siting the treatment facility at the Cemetery area sites would have less visual impact than at Tonini, especially when the view from Turri Rd is considered.

- 4. **Other Plant Siting Considerations.** Treatment plants are likely to experience sewage spills. The facility design should explicitly identify where in the treatment process spills are most likely to occur, design to avoid these spills, and plan to contain spills that do occur. The proximity and relative elevation of the Cemetery area treatment plant sites to Warden Lake are a concern in this regard. The facility would be perched on a plateau immediately adjacent to this important wetland resource, and the space limitations of the sites, combined with elevation drop and proximity, would appear to make it more difficult to prevent spills at these sites from reaching waterways than conditions at the Tonini site. The Facultative Ponds technology, and the proximity between storage ponds and the facility, both help address this important issue.

5. Agricultural Lands

The mitigation measures regarding agricultural land propose conservation easements off site. Such easements should be held by an entity which has experience with such easements, has preservation of agriculture as a mission, and is distinct from the County. All efforts should be made to acquire these conservation easements within the Los Osos Valley along the eastern edge of the Los Osos community to protect those lands most at risk due to the potential future spread of the community into the agricultural valley.

In addition to the off-site easements, under all of the proposed projects the remainder of the Tonini property needs to be permanently protected via a conservation easement. This should be an additional required mitigation measure, not a part of the currently proposed easement acreage. This easement should allow only agriculture, require Best Management Practices for that agriculture (NRCS and UCE can provide expert oversight on BMPs), and should prohibit subdivision of the property. This should apply to all areas of Tonini not utilized for the project, and should be designed to include the spray fields in the event they are downsized in the future through additional reuse opportunities. Such easements should be held by an entity separate from the County which has preservation of agriculture and conservation of resources as a primary mission.

6. Growth Inducement.

Where the conveyance pipeline between the service area and the treatment facility crosses private property, it may provide those properties with increased argument and legal standing to hook up to the system, which could increase the development potential on their (rural) property. Right of way easements for the collection system should explicitly address this issue to reduce this potential. These could be in combination with the easements discussed in #4 above.

7. Collection System

The DEIR identifies both STEP/STEG and gravity as viable collection system alternatives, with differing positives and negatives. The MBNEP supports the County's approach to use the community survey and the Design-Build bid process to assist in making the most informed decision between these options. We concur with the Los Osos TAC and the DEIR that with proper design, construction, operation, and maintenance, either system would work. The varying impacts of this choice need to be clearly communicated to the residents and their preference should be heard as the systems vary widely in terms of construction and ongoing maintenance impacts affecting residents.

If a gravity system is built, the construction work to the road network provides a substantial opportunity to integrate stormwater measures and 'Low Impact Development' measures designed to infiltrate stormwater into the ground as opposed to channeling it to the Estuary. The MBNEP encourages the County to pursue these options and offers our assistance in that effort.

8. Water Conservation

Los Osos has significantly damaged its sole water supply, first by contamination of the upper aquifer and now, partly as a result, by overdraft of the lower aquifer causing active and rapid salt water intrusion. Aggressive water conservation is far and away the most cost effective approach to solving this problem, and it can be pursued immediately. The proposed conservation effort in the DEIR should be viewed as a good starting place, but even more ambitious efforts are needed.

9. Treatment Technology

The near elimination of biosolids disposal is a significant environmental benefit of the Facultative Ponds treatment approach. The capacity of a PMFP system to stabilize treatment plant flows is also an important benefit to reduce potential spills. The revised GHG emissions analysis suggests that this alternative may not be the most energy efficient due to additional nitrification/denitrification processes, but see the question raised in 8(b) below.

Regardless of site and technology, the treatment facility should incorporate current LID/stormwater design to capture and infiltrate runoff from the facility.

10. Greenhouse Gas Emissions

- a. Are the energy costs to pump treated effluent to Broderson included in the GHG emissions analysis? They would apply equally to all projects, but would still inform the total operational impacts and comparison with the AB32 standard. Please highlight where these emissions are included in the analysis, or if they are not, please update the analysis and conclusions accordingly.
- b. Are the GHG emissions associated with biosolids processing and disposal included in the GHG emissions analysis? The Facultative Ponds treatment produces much less biosolids, with a resulting reduction in long distance truck traffic. Please highlight where these emissions are included in the analysis, or if they are not, please update the analysis and conclusions accordingly.
- c. Another possible error in Appendix K: Appendix B says that PMFP with a STE collection system will require more methanol as a carbon source

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for nitrification/denitrification processes due to 3.5 times higher nitrogen in the incoming flows (app B pg. 5-7, last paragraph). The table in Appendix K pg. GHG-8 shows identical methanol inputs and therefore GHG consequences of projects 1 and 4. This table feeds into the summary analysis of GHG emissions. This appears to be an inconsistency.

- d. The standard used in the DEIR for assessing the significance of GHG emissions effectively ignores all construction emissions as inherently insignificant, since AB32 compares 1990 emissions with 2020 emissions. (App K, pg 5.9-69, paragraph 2) This seems like a clear example of following the letter of the law and not the spirit, and it would be unfortunate if this becomes the standard analysis approach for CEQA. The law was enacted because GHG emissions create long lasting disruptive effects on our climate. It is cumulative emissions over time that causes the problem. In this project, the differences in construction emissions between projects are relatively small. But as a CEQA approach, it seems misguided to only consider differences in ongoing operational emissions and ignore differences in **total** (short and long term) GHG emissions between project alternatives.