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COUNTY OF SAN LUIS OBISPO DEPARTMENT OF PUBLIC WORKS

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State Clearinghouse Number: 2007121034

Comments Must Be Received By: January 30, 2009

Dear Mark Hutchinson,

Jan 26, 2009

Enclosed please find my comments for the LOWWP DEIR, including a few attachments for clarity.

I also want to express my concern with the process: I understand the dilemma that the county (and LO!) are in with the "time line rush" but I believe that the two projects, the wastewater project and the water reuse project must be intimately connected to get the best environmental projects at the lowest cost. I am concerned with the "throwing away" of farmland & water at Tonini. If the two projects were united we may not have the same situtation.

Sending out a "half" project for public review, that may need to be revised because of new insights, may led to a misinterpretation of intent and cause ill feelings against the county. Or we may not be able to pursue a great water recharge idea because we didn't consider it in the wastewater project. Or we may need another EIR if we don't do the complete package of both projects first.

examples of "possibilities" are included in my comments.

Thank you in advance for your efforts in trying to protect Our National Estuary with the fragile surrounding habitat, our precious farmland and the wonderful town (and people) of Los Osos.

Marie Smith

1149 First Street

Marie Smith

Los Osos, CA

(805)528-6656

PROOF READING COMMENTS:

1. There was a lot of repetition: this may good for someone who just goes to a particular section, but sometimes it was overdone!

example of repetition on the same page, Page 2-3:

top of page

Another important consideration of the Project involves water resources issues related to seawater intrusion that is contaminating the Los Osos groundwater basin. While the purpose of the LOWWP is to develop a community wastcwater system, implementation measures for effluent disposal can enhance opportunities for the water purveyors to improve the local water resources.

bottom of page

Another important issue relating to the LOWWP involves water resources issues related to seawater intrusion that is contaminating the Los Osos groundwater basin. While the main benefit of the LOWWP is compliance with RWQCB directives to alleviate groundwater contamination from existing septic systems, implementation measures adopted for effluent disposal methods can also enhance opportunities for the water purveyors to improve the local water resources.

2. some typing/document errors:

page 3-8 word level: "On March 27, 2007, the County Board of Supervisors certified a "evel of

page xi repetitions:

NI No Impact NI No Impact RWQCB Regional Water Quality Control Board RWQCB Regional Water Quality Control Board

page ix repetition:

AFY acre-feet per year AF Acre-feet AFY acre-feet/year

page 2-41 unfinished sentence

5.6-B6 ... Mechanical backhoe trenching shall be conducted within the

page 2-41 has extra H5.6-B5 H Historic-era ranch/farm complexes

- Table 5.5-1 is mislabeled, it should be called Biological Resources Significance Determination (references: geology section & Table 5.5-2 is called Biological Resources Proposed Mitigation Measures)
- page 5.8-2 2nd sentence from bottom of page has error: "there are is goal"
- page 7-49 table 7-6 is on page 7-37 therefore statement "Table 7-6 below is wrong"
- <u>page 7-65</u> "All four proposed projects assume a 46-acre storage pond" = 46 acre foot storage pond (reference: at bottom of Page: "For a 46 AF pond, the site area would be about 6 to 8 acres.")

MY COMMENTS/OBSERVATIONS:

- NOTE 1: There are many repetitions in the document. I will only refer to one statement for each of my comments: eg. if a correction is to be made to the document, then the corrections will also have to be located in the rest of the document.
- NOTE 2: I realize the county is trying to deal with the wastewater project separate from the future water project(s), but many of my comments are based on the belief that we all need to work together now to do what is best for our aquifer, our town and the Morro Bay National Estuary
- NOTE 3: I have (attached) several documents, referenced in my/LOWWP DEIR comments, for your convenience.

comment:

- = I found the maps and charts in the project description section helpful especially map: Exhibit 3-3 Potential Treatment Plant & Effluent Disposal Sites and
- Table 3-7: Summary of Proposed Projects Los Osos Wastewater Project (LOWWP) and
- Table 7-7: Screening of Wastewater Treatment Process Alternatives BUT: comment: page 7-47, & 7-48 Table 7-7 Screening of Wastewater Treatment Process = could include biosolids removal comparison
- <u>comment: Table 7-6:</u> Screening of Wastewater Treatment Plant Site Alternatives = baseline criteria "costs" appears to be mislabeled

comment: page 4-3:

= Map exhibit 4-1 "Environmental Setting Map" doesn't show the surrounding greenbelt ie: adjacent to the Broderson effluent disposal site is the Morro Dunes Ecological Preserve

comment: page 1-4 second sentence:

- "liquid waste is dependent on the ability of the soil to disperse the pollutants. Key controlling factors include soil composition and the vertical distance between the leach field and the ground water."
- = I believe that the pollutants are not just "dispersed" but that there are microorganisms at work too! "where microorganisms decompose the nitrates" could be added to educate people that it is not just a dilution process.

comment: page 1-4 third paragraph:

= the word groundwater is not reflecting the complexity of the situation.
sentences in the third paragraph that are considering problems with ground water
pollution are referring to the upper aquifer and then the sentence "to compound
matters, the Los Osos area draws its potable water supply from the groundwater" are
referring to the lower aquifer: (it is my understanding that most of the potable water
is now being taken from the lower aquifer and that is why the salt water intrusion is
happening!)

<u>comment page 2-27:</u> Table 2-8: Summary of Environmental Impacts and Mitigation Measures

"5.2-B: The proposed project would not degrade groundwater quality."

LTS NI LTS NI LTS NI LTS NI are the impact levels given to all the projects

- = We may need to return treated water to the prohibition zone to make the above statement true:
- * eg: what about when septic water is no longer going into the upper aquifer? we need to protect against worse pollution: what is going to fill in the void in upper aquifer that is created by removing septic tank water (some negative possibilities are farmland water, the old Turri Road dump, and seawater intrusion from the bay).
- = more comments concerning the removal of septic tank water from the area:
- = 1. is there any possibility of sink holes or settling of buildings with the moving around of water?
- = 2. We may need to return treated water to the prohibition zone area to keep LO green and the estuary fringe & wetlands alive as required by

The Estero Area Plan: "protect and manage sensitive habitats", and "Highly sensitive habitats include the riparian woodland and riparian scrub, freshwater marsh and coastal salt marsh" and "The Morro Bay tidelands and adjoining shoreline areas are important areas for preserving the complex ecology of the bay as well as unique scenic amenities. Marshlands are particularly important as a source of food and refuge for marine life and also provide feeding and nesting areas for a variety of waterfowl and shorebirds."

(map of wetland locations: LOWWP DEIR exhibit 5.5-2)

= 3. the lost of wetlands affects nature directly, and there may also be unforseen consequences: ie: when the fringe "dries up" people may be able to build closer to the estuary and the wildlife corridors, adjacent to the estuary, may be lost. "Setbacks are measured between the upland extent of the wetland vegetation and development."(p 7-87 of the Estero Area Plan)

comment: page 1-10

- "Another important consideration of the Project involves water resources issues related to seawater intrusion that is contaminating the Los Osos groundwater basin. While the purpose of the LOWWP is to develop a community wastewater system, implementation measures for effluent disposal can enhance opportunities for the water purveyors to improve the local water resources."
- = seawater intrusion was caused by everyone and therefore correction of this problem should be paid by everyone, including private well users.
- = water purveyors need to be involved now to have the best water management plan

<u>comment: page 7-65 Urban Reuse</u> "Urban reuse consists of using tertiary treated, disinfected effluent to irrigate lawns and ornamental plants."

= There are many possibilities: One example: If a decision is made for urban reuse, ponds in the mid-town site could be used to store water and by pipe/seepage replenish the bay fringe and construct wetlands. And ponds could become not only storage & recharge, but be used as a recreational park, or be productive: produce fish, water plants! And if the Broderson leachfields are temporarily "out of order" this could be used to handle the tertiary treated water that already left the out of town sites, headed for LO. (see my last comment, my general comment)

comment page 2-39 5.5-A15 Mitigation lands within the Broderson property shall include land that "is characterized by habitat types with an open canopy";

= what about the oak, mansanita and eucalyptus forests? Please do not destroy one type of habitat in order to mitigate another -

suggestion: do an exchange with adjacent land that is already full of veldt grass to build the disposal site and keep all these good habitats.

comment page 3-43

"The Broderson site would be accessed by a gravel road that extends south from the end of Broderson Avenue as shown on Exhibits 3-6 through 3-9. The site would require fencing to limit public access since the treated effluent would meet secondary but not the more stringent Title 22 tertiary standards for recycled water."

= hikers, runners, horseback riders use the Broderson N/S trail - what will happen to their trail? how will they access the oak forest trails and the higher elevations?

= In fact the Estero Area Plan, on page 157, would support keeping the Broderson trail open for hikers!

ESTERO AREA PLAN UPDATE 5-21 CIRCULATION NOVEMBER 2004 BOARD OF SUPERVISORS-APPROVED PLAN

1. Trails. The county should work with the community and affected property owners to develop a riding and hiking trails program with major emphasis on a trail route across the Los Osos South Bay hillsides to Montaña de Oro State Park and scenic routes within and on the fringe of the community linking public recreation areas.

comment page 3-42

"as long as the instantaneous application rate and the annual effluent disposal total do not exceed the leachfield's design capacity and annual hydraulic loading capacity respectively, leachfield disposal" can be used... "during the winter wet season when the sprayfields are not available

- = hopefully the water seeps which come from rainfall on the land above the Broderson site have been taken into consideration
- = if the leachfield is plugged, or the timing of the destruction & reconstruction of the leachfield, or an earthquake coincide with heavy rainfall then what?

comments page 3-65 "About every 5 to 10 years when clogging occurs, the effective flow rate decreases significantly and the leachfield requires excavation. The subsurface ground would be ripped or disked, and then the leachfield would be reconstructed"

- and (page 5.9-15 "and a possible second pump station at Broderson would be required to achieve equal distribution throughout the disposal field."
- = is this the best we can do? Adjacent homes & nearby wildlife & the many hikers/runners who use this area will be affected
- consider the significant noise (page 5.10-19) and significant air pollution and significant cost during the initial construction and 5-10 year replacement.

- consider the significant loss of materials with the periodic replacement of the geotextile fabric, leachfield pipes, native soil backfill (page 5.10-18) and the use of the trucks & manpower; plus the ongoing maintainance of pumps & monitoring of disposal flow.
- there will also be continual <u>sound</u> (pumps) & <u>visual effects</u> (pump station, fencing, and lighting (appendix N page 5.12-36), and sometimes maintenance trucks.)
- = <u>If the water is treated to a higher level</u>, (necessary according to P 7-67) it can be injected and/or used to grow plants and/or have nature ponds, use it as it percolates back into the ground. If leachfields are still used, with higher purification treatment, they may not need to be replaced as often. Let's be more creative! As for cost, this would be part of the water project because more water would reach our aquifers.
- = Will the <u>lights</u> be like the lights in the Ralphs parking lot, which cause stress on nearby neighbors? If so, the lights could be turned on manually if they are needed for emergencies AND there could also be an alarm system set up with motion detectors which turn on the lights if intruders are present.
- = comment for all projects in LO that require lights: night sky viewing is important to the people of LO and our visitors.
- = are there any other areas which can be used to reach the lower aquifer?
 ie: The DEIR's Appendix P (on Page A-4, under Appendix A: Past Project Documents) lists a Cleath & Assoc. report titled
 "Scenic Way Investigation with East Side WW Disposal (Draft) July 2003
 (map & info: see attachment I)
- two test holes in this report, "TH2 & TH4, were drilled at the primeter of the ground water basin" and "intercept Francisan Formation metavolcanies at depth".
- = Is there a possible path to the lower aquifer near here?

comment page 7-8 Table 7-1 and Appendix P pages 5.6:

- Why were no injection wells listed for consideration? Circumstances may change to where we want to and can use them
- = Will we need another EIR if we want to add them later and they haven't been listed in this document as a possibility?

Turri Road/Tonini

comment page 2-42

5.8 - A1 "d) Buses, Bicycles and Pedestrians. The work zone shall provide for passage by buses, bicyclists and pedestrians, particularly in the vicinity of schools."

= Turri is widely used by walkers, bikers & runners: if d) is not followed then notice needs to be given to the local biking clubs and posted not only at LOVR but also at the South Bay Blvd. entrance too!

comment page 5.9-9; Table 5.9-3: Air Quality Significance Determination under treatment:

"Expose sensitive receptors to substantial pollutant concentrations? PS PS PS PS LTS Create objectionable odors affecting a substantial number of people? LTS LTS LTS LTS NI"

- = becomes LTS & NI under accumulative?
- = Please make the quality of air on Turri Road a top priority: Having healthy air is extremely important to the many walkers, bikers & runners who use Turri Road, a scenic country road. Please observe that this is also a windy area so particles may be carried "on the wind".
- = Turri is published as a biking route in the county's Regional Rideshare map.

comment page 5.11-9 Disposal Sites:

"According to the 2007 Crop Report for San Luis County, this crop had a per acre value of \$5,888.76, and rangeland grazing had a value of \$10 per acre. Therefore, the potential lost revenue associated with using the Tonini parcel as a disposal site is \$1,008,398 per year."

= what an expensive way to go! take valuable and productive land to use as a dump!

comment page 7-68: "the environmentally superior alternative is Proposed Project 4 for the following reasons:"

- "3. Consolidates LOWWP Facilities. Since the sprayfields will be located at Tonini, locating the wastewater treatment plant and storage pond on the same site for Proposed Project 4 reduces the potential impacts to biological and cultural resources and prime agricultural land, and
- 4. Agricultural Operations. Because Proposed Project 4 will convert only one agricultural parcel to public purposes, this alternative has the lowest loss of potential agricultural revenue to the local economy."
- = the type and size of the parcel are also important.

comment Appendix C page 5.1-7 San Luis Obispo County General Plan Land Use Element and Local Coastal Program - Estero Area Plan

= guides us to keep the farmland as it presently exists and not to use prime agricultural land except where it can be demonstrated that no alternative building site exists: what about:

= Appendix C - Exhibit 5-1.2 this map shows the amount of prime & non-prime agricultural land:

Tonini has much more prime agriculture land: 178.7acres; plus non prime ag land 134.1; while the "series of parcels east of the cemetery" (names of parcels: Andre 2, Robbins 1, Robbins 2 & ?) have only: .5 prime ag. land acres; and 76.5 non prime ag. land acres = couldn't this "series of parcels east of the cemetery" be used instead of Tonini for treated water storage or use; or for spray fields: the "series of parcels east of the cemetery" are in our aquifer, adjacent to the Branin, Cemetery, Giacomazzi Parcels and closer to LO. = we need to get the water back to LO, not just "throw it away in a sprayfield".

If we continue to pursue Tonini here are more comments/questions:

comments page 3-65 Sprayfields:

"harvest the grass grown on the site several times a year and hauled to the Cold Canyon and/or Chicago Grade landfills (Appendix B, Project Description Data; Kennedy/Jenks Consultants 2008)."

- = is this because the grass is contaminated? This seems wasteful. Is this the best we can do?
- Can we rent the area to a farmer to grow crops from the water we dispose there?
- If grass is still to be grown and it is not polluted, then harvested it for cow food.
- Can we use the area to treat the water further by using plants as purifiers and then ship the water back to LO to keep our town green & the bay fringe alive?
- = I am also concerned with any plan which not only loses our drinking water, but destroys the Morro Bay National Estuary fringe by removing water from its wetlands without returning water. This Estuary fringe is critical to much wildlife and is located on the Pacific Flyway.
- = I am concerned with taking any land that is under the Williamson Act and destroying the ability to return it back to farmland in the future. Let us use the land wisely.
- = Since <u>disposal of water at Tonini should only be temporary</u> because it is in a different aquifer, I do not believe that we want to permanently "destroy" Tonini in case we find another method of water reuse/disposal in LO. I do not understand why the sprayfield cannot remain in an agriculture category if the water is treated to a higher level so that it doesn't ruin the soil. (LOWWP DEIR page 8-2, par 2 says no)
- = comment figure 4.2 in appendix b shows drainage channels running through the spray field area, eventually joining the creek channel: if the water is good enough for the creek, then it should be good enough to keep the agriculture land designation.

Random questions concerning the Tonini site (or where applicable: other farmland sites):

- = Who will own the land? eg. if the money to purchase it comes from the people in the prohibition zone, then any benefits from the land should be used to offset the sewer costs. eg: Are there any minerals or mineral water to be had? any productive crops? can we rent the unused portion to farmers or use it for grazing cows?
- = Does owning the land give ownership to the water in that aquifer too?
- If the Willamson Act can be "overturned" (treatment & disposal site on farmland!), then other "laws" can be overturned. What will stop this plant from expanding, becoming a population growth inducing plant?
- = Who owns the treated water that came from LO? The people in the prohibition zone originally purchased the water from their water purveyors, and now will pay to clean it up; everyone using it, including private well owners, should pay for any benefits from that water beginning at the head of the pipe going back to town or other farms. (see my general comments at the end for more)

comments page 5.8-1 and Appendix J page 5.8-4; Appendix J: Table 5.8-4:

"Turri Road - is a two-lane rural roadway that extends north of LOVR and westerly to its connection to South Bay Boulevard. Turri Road would provide access to the Tonini sprayfield site on the west side of the roadway. Turri Road is controlled by stop-signs at the LOVR and South Bay Boulevard intersections and is located outside of the Urban Reserve Line."

- = The above paragraph and the capacity number in Table 5.8-4 don't take into account the fragility of Turri Road. Extra trucks and cars would not be good for this area. This road, with sections adjacent to Los Osos Creek (part of our National Estuary), has areas of disrepair. A very bad deteriorating section of road, already threatening the creek, is located .8 mi. from So. Bay Blvd. Not only increased wear & tear are to be considered on Turri, but also car and truck pollutants left on the road enter the creek via rain runoff.
- = page 5.8-10, Table 5.8-2: Consistency of the Proposed Projects with Traffic and Transportation Goals and Policies talks about temporary interference during construction, but ongoing LOWWP activities should also be investigated for traffic impacts. Turri is full of sharp curves & areas of steepness, in fact two people in a car recently got killed when their car didn't make the curve that is .8 mile from So Bay Blvd. Turri Road is listed in the county's Regional Rideshare map, and is enjoyed by many as one of the last country roads. Increased exhaust pollution and loss of road safety due to increased truck use should not happen next to bikers, runners or walkers on a rural road where visibility is not always good. Access for the LOWWP disposal site should be from LOVR, not from So. Bay Blvd. Also: this road should not be used as a connector road to SLO for the LOWWP project in LO.

comment page 5.8-2 & Appendix J- (page 52 of 206) (and repeated throughout the DEIR) and Appendix J exhibit 5.8-1 (map)

"9th Street - is a north-south two-lane collector street that extends between Santa Ysabel Avenue on the north and LOVR on the south. The roadway continues as Bayview Heights Drive south of LOVR. The LOVR/9th Street intersection is signalized.

10th Street - is a north-south two-lane collector street that extends between Santa Ysabel Avenue on the north and LOVR on the south. The LOVR/10th Street intersection is signalized. "

9th and 10th streets are NOT through streets!

the main traffic flow from Santa Y sabel near this area:

- 7th St. to Ramona, head east on Ramona and curve south onto 9th street to LOVR
- 11th St. to Nipomo, head west on Nipomo to 10th St., south on 10th to LOVR
- = the map Appendix J exhibit 5.8-1 doesn't reflect LO, LO is NOT a "grid street community". Many streets do not go through. This makes for great neighborhoods.
- = A detailed map which indicates which steets go through should be given to the workers of the LOWWP.
- It appears that the problem may have come from Associated Transportation Engineers study dated 10/7/08 (Appendix J - p. 46)

comment page 5.2-3

"Seawater intrusion in lower aquifer E Zone... is approximately located between Broderson Avenue and Palisades Avenue."

= won't the addition of water at Broderson Ave. push the salt water further inland?

comment page 5.3-4 "Thresholds of Significance"

= I don't see the question asked: would the project substantially alter the existing drainage pattern, so that it would destroy habitats by "drying up" an area?

comment page 7-23 Table 7-5: Screening of Collection System Alternatives under Gravity " Least ex-filtration "

- = this appears to conflict with appendix A, p 55 & 56 of 140 which indicates STEP is better for this important point
- = and what about a vacuum system?

comment page 6-2

- = <u>Please review Table 6-2</u> Buildout Population and Housing Data for Inside and Outside the RWQCB Prohibition Zone in the Community of Los Osos, and the paragraph before Table 6-2 against your references sited under Table 6-2.
- * eg. the figures in your paragraph and table do not reflect the information in the references under Table 6-2 and the references are not complete!

(I have listed & included some attachments for your convenience.)

- * information from reference "a: Draft Environmental Impact Report for the Los Osos Community Services District, Wastewater Facilities Project, Page 61, November 2000": (see attachment 2)
- = These tables use the <u>Urban Reserve Line</u> as the focus boundary and the RWQCB Prohibition Zone/collection Area (87% of Urban Reserve Line) is listed as 17,963; (on following page there is more explanation "the collection area is approximately 78% of the total area within the RWQCB Prohibition Zone"... "and about 47% of the area within the Urban Reserve Line for Los Osos".....)
- = this document says total population at buildout to Urban Reserve Line is 20,590 (check this information against your table!) (I am attaching an Estero Map to show the URL. line with the LO Urban Neighborhoods) (see attachment 3)

<u>NOTE</u>: the maps in the Estero area document use the Urban Reserve Line as the main boundary for LO.

AND continue reading to see that Estero Plan may be saying 19,713. for total buildout (or 17, 334!)

The confusion of past documents gets compounded by using outdated, incomplete or incorrect figures!

- * <u>information from reference "b</u>: Based on the remaining population after the buildout population within the RWQCB prohibition zone is subtracted from the total buildout population in the Community of Los Osos".
- = the number 28,688 used in your table is the absorption number, not the buildout number, and therefore your data is miscalculated. see reference "c" below

* information from reference "c: Land Use Element of the San Luis Obispo County General Plan, Estero Area Plan, Page 2-15, (Approved November 2004 and Amended July 2006)".

28,688 is from Table B - Absorbtion Capacity Estero Planning Area" (attachment 4) (for a better understanding here is a definition from a previous Estero Area Plan: "projected absorption capacity, which is the potential planning area population resulting from unconstrained growth and fully-occupied development to the maximum permitted in each land use category. (framework for planning offers a more detailed discussion of absorption capacity)"

AND

Table A. "Population Projections Estero Planning Area", has been replaced by Table 2-5 "Estimated Growth & Buildout". (see page 2-14 of Estero Area Plan Update)
Los Osos is missing from Table 2-5: Estimated Growth and Buildout (see attachment 5)
It is my understanding that it was because Los Osos is waiting for its Habitat
Conservation Plan.

IN FACT:

There was a complete <u>Table 2-5</u> "Estimated Growth & Buildout" on p 2-22 of the <u>Estero Area Plan Update Jul 2004</u> of the <u>Planning Commission - Recommended Plan</u> which indicated that the <u>LO buildout was 19,713</u>. (see attachment 6) AND

In the Estero Area Plan revised 2002, the Los Osos population was listed as even less: 17,334.

- * information from reference d. "Based on 2.32 persons per housing unit which is the combined average persons per housing unit that occurred in 1990 and 2000 in the Community of Los Osos, as described above and rounded to the nearest hundred."
- = if the other figures were wrong in your table and also used for this calculation, then this calculation is wrong too!
- = <u>another observation</u>: because of the hard economical times, people may share a house so the figure 2.32 (persons per housing unit) may also change.

Two of the elements that control growth are the amount of water and the capacity to treat sewage. Too many people can destroy the very special area next to a National Estuary which is located on the Pacific Flyway which wildlife, birds and people (including visitors) depend upon. I have a concern with the documents which project an dramatic increase in population without proper consideration.

comment page 8-2

"The environmental issues that were determined not to be significantly affected by the proposed project and therefore, do not require evaluation in the document, per section 15063(c) of the State CEQA Guidelines, are as follows:• Mineral Resources • Population and Housing (Displacement of Substantial Numbers of Existing Housing and People)" and referring to Tonini

"Because only one dwelling is affected, the project will not displace substantial numbers of existing housing or persons. Therefore, impacts associated with the displacement of persons and housing are considered less than significant."

= the cost of the sewer, if not drastically lowered, will displace a <u>significant</u> number of people.

The 218 vote that passed for \$25,000 per house is misleading. Some people, even though they couldn't afford it, voted yes to appease the Water Board and to get the county to take over the project from the bankrupt CSD. If the cost is not substantially lowered MANY PEOPLE will have to move.

comment: Appendix P, page 6

"Agricultural Reuse: Agricultural reuse consists of using treated secondary or tertiary effluent to irrigate agricultural crops. The agricultural land irrigated with recycled water can be managed to maximize disposal of water by increasing the crop density and/or planting crops with high evapotranspiration potential, such as grasses for forage that can be irrigated year-round."

= The above definition's emphasize is disposal, not recharge! I thought that the reason for agricultural reuse was to replace the current amount of water that farmers were using from the lower aquifer with our treated water. The above definition indicates a change of crop which would not only affect the commodity market, but also use up more of our water, without saving the lower aquifer.

General Comment:

It appears that when we boil all of this down that this is really a water management project located in a very complex geological area. It would seem that the best approach would be to look at a complete package, the wastewater project and the water reuse project together, instead of adding a water package on later. This may save costly economical or environmental mistakes or duplication of efforts. A "dividing line" could be agreed upon to handle the cost issues. Hopefully the county and water purveyors will get together soon and come up with a good plan!

two examples, of where everyone needs to get together now before we start anything:

<u>comment</u>: if the treatment plant is out of town and if the Mid-Town site is chosen for Urban Reuse on a large scale (Mid-Town site ideas on page 5 of this document) then the Mid-Town pump station (used to pump all waste out of town) should possibly be at the corner of So. Bay & LOVR instead of at the Mid-Town site.

comment page 8-2 (under SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES)

- "Land devoted to treatment facilities would be permanently committed to supporting urban uses. Treated effluent, spray field, and leachfield areas would be permanently committed to disposal of treated effluent."
- = We need to unite & decide what we want to do "permanently" before this happens! (hopefully my comments have generated some disposal/reuse ideas)

With any project there will be a lot of change and to determine if we are on the right path all we need is do is ask: will the end result be better than what currently exists for people and nature?

Thank you for considering my input, Marie Smith Los Osos





INTRODUCTION

Scenic Way is a residential street which lies in an interdunal depression at the northeastern boundary of Baywood Park. During prior investigation of treated wastewater disposal sites, Scenic Way was identified as an area of potential concern for rising water attributable to treated wastewater disposal (Wastewater Disposal Sites Evaluation, Cleath & Associates, October 2001). A Harvest well was tentatively proposed for the area, as noted in the October 2001 report (page 23):

The Harvest well on Scenic Way would be beneficial if shallow perching clay beds are not present and would be recommended if a more detailed understanding of the ground water conditions in that area verifies its effectiveness...otherwise, a shallow subsurface cut-off drain may be required.

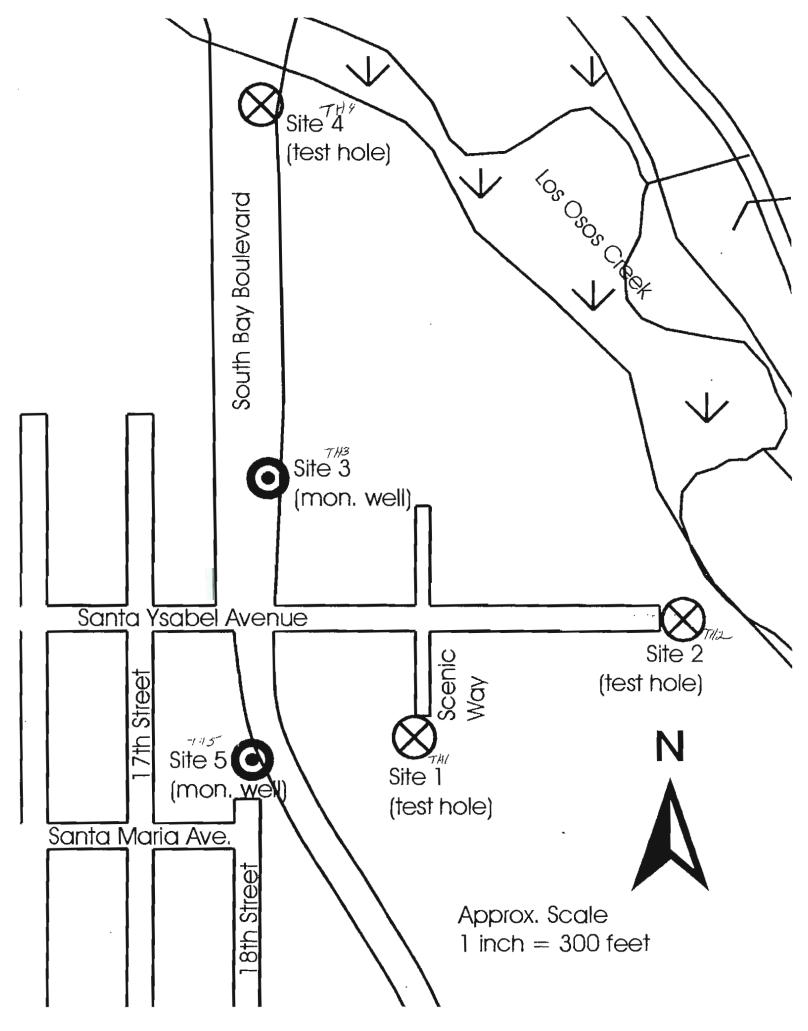
The concern for rising water was based on two drilling logs from private wells that reported sandy brown clay at 10-65 feet and 10-53 feet depth at the south end of Scenic Way. Other nearby logs, however, indicate that the dune sands along Scenic Way should extend significantly deeper. The current investigation was designed to characterize the subsurface lithology, provide data for evaluating ground water mounding under wastewater project conditions, and to include construction of monitoring wells for use in treated wastewater disposal operations.

DRILLING AND WELL CONSTRUCTION

Five test holes, TH1 through TH5, were drilled by S/G Drilling under Cleath & Associates' supervision between March 25 and April 2, 2003 (Figure 1). The test holes were advanced with 8-inch diameter hollow-stem auger, and sampled using standard geotechnical methods at five-foot intervals. Lithologic logs of the test holes are in Appendix A. Selected samples were analyzed for grain size and permeability by Fugro West, Inc (Appendix B).

TH1 was drilled on the southern cul-de-sac of Scenic Way, where private residences in a local topographic depression are the primary concern for rising water impacts. TH2 and TH4 were drilled at the perimeter of the ground water basin along Santa Ysabel Avenue and South Bay Boulevard, respectively. These test holes intercept Franciscan Formation metavolcanics at depth. Test holes TH3 and TH5 were drilled adjacent to future treated wastewater disposal areas, and were converted to monitoring wells for future use during disposal operations. TH3 (Well 30S/11E-8Ma) is located at the south end of a future disposal site on South Bay Boulevard, while TH5 (Well 30S/11E-8Mb) is located near the northeast end of a future disposal site on Santa Maria Avenue/18th Street.

The monitoring wells are completed with 2-inch diameter PVC with 10 feet of well screen (0.020-inch slots) set at the water table. The wells are constructed for the purpose of monitoring the development of ground water mounding associated with future treated wastewater disposal. The wells are permitted



- Programs aimed at facilitating coordination among agencies and organizations involved in management and conservation/preservation of sensitive resources, including USF&WS, CDFG, California Coastal Commission, San Luis Obispo County, the LOCSD, MEGA, NEP, Land Conservancy of San Luis Obispo County, and others;
- The creation of a landbank program to facilitate the purchase of properties with high quality habitat within the Greenbelt, to be repaid over time from fees on new building permits;
- Programs for the acquisition of properties within the Greenbelt with significant habitat resources;

Population and Estimated Wastewater Flows

Population

The design capacity of the proposed wastewater treatment system is based on population projections and calculated flows for the service area in the year 2020. Population projections for the community have been calculated by various entities over the years, including the SWRCB (1982-2007), the County of San Luis Obispo (Draft Estero Area Plan, 2000), and members of the LOCSD Wastewater Committee. The population served by the proposed system is summarized on Tables 3-5 and 3-6.

Table 3-5: Buildout Estimate and Adjustments Within The Urban Reserve Line Source: LOCSD and Montgomery Watson Americas, 2000

Buildout Population of Coffected Area:	19,306
Buildout Population of Uncollected Areas:	2,628
Sub-Total:	21,934
Adjustments:	
Morro Palisades (204 acres)	1,325
Broderson (north 40 acres)	-18
Total	20,590

Table 3-6: Summary of Population Served By the Wastewater Facilities Project Source: LOCSD, 2000

Area	Population At Buildout	Percent of Urbar Reserve Line	
Urban Reserve Line	20,5901	100%	
Adjustment for Uncollected Areas:	-2,628	13%	
RWQCB Prohibition Zone/Collection Area	17,963	87%	

See Table 3-5.

The collection area is approximately 78% of the total area within the RWQCB Prohibition Zone (see Figure 3-2) and about 47% of the area within the Urban Reserve Line for Los Osos. Areas within the Prohibition Zone with lot sizes of one acre or more are excluded from the collection system. These areas include the Martin Tract, which surrounds Monarch Grove Elementary School, and Bayview Heights, which lies south of Los Osos Valley Road. In addition, the Monarch Grove subdivision has been excluded from the collection system because it has its own package treatment plant.

Wastewater Flows

Based on the population described above in Table 3-5, wastewater flows were estimated as follows:

Dry Weather Flow:

Estimated Savings from Water Conservation Program:

Adjusted Average Dry Weather Flow:

Peak Wet Weather Flow:

1.365 million gallons per day
0.150 mgd
1.200 mgd
1.700 mgd

Supporting Public Services

Public services necessary to construct, operate and maintain the facility include water and electric power; fire and police protection services may be also required in the event of an emergency. Water used by the facility will be minimal. Electric power is currently provided to the community by a number of companies. Reliance on police services is expected to be minimal. Fire service is located nearby, but due to the nature of the facility, would rarely be summoned.

Reasonably Foreseeable Future Phases

This project is designed to serve the 2020 buildout population of the Los Osos area as envisioned by the Estero Area Plan. Although future phases may be necessary, the project incorporates reasonable estimates of long-term growth and is considered cumulative. In the future it may be necessary (or desirable) to collect septic tank effluent from areas outside the Prohibition Zone adopted by the RWQCB, such as Cabrillo Estates. For this reason, the callection system is being designed so that it can be readily extended to these areas if necessary in the future.

Another option being considered for future phases of the Wostewater Facilities project is the recycling of biosolids for re-use as a soil amendment as an alternative to hauling. Under this alternative, treated sludge would be removed from the Wastewater Treatment facility about three times per week and hauled to bio-solids recycling center where it would be combined with green-waste (organic mulch) and allowed to decompose. The bio-solids recycling facility would consist of about four acres and would contain a two-acre covered concrete pad and support facilities as illustrated by Figure 5-11.

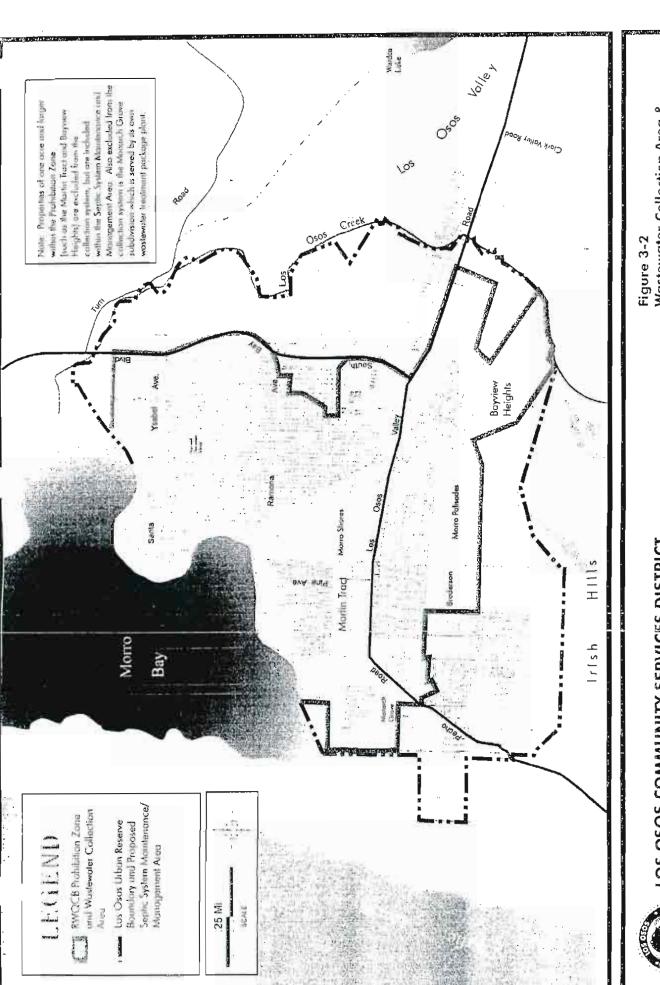


Figure 3-2 Wastewater Collection Area & Proposed Septic System Maintenance and Management District



LOS OSOS COMMUNITY SERVICES DISTRICT

WASTEWATER FACILITIES PROJECT

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LOS OSOS URBAN AREA: COMMUNITYWIDE

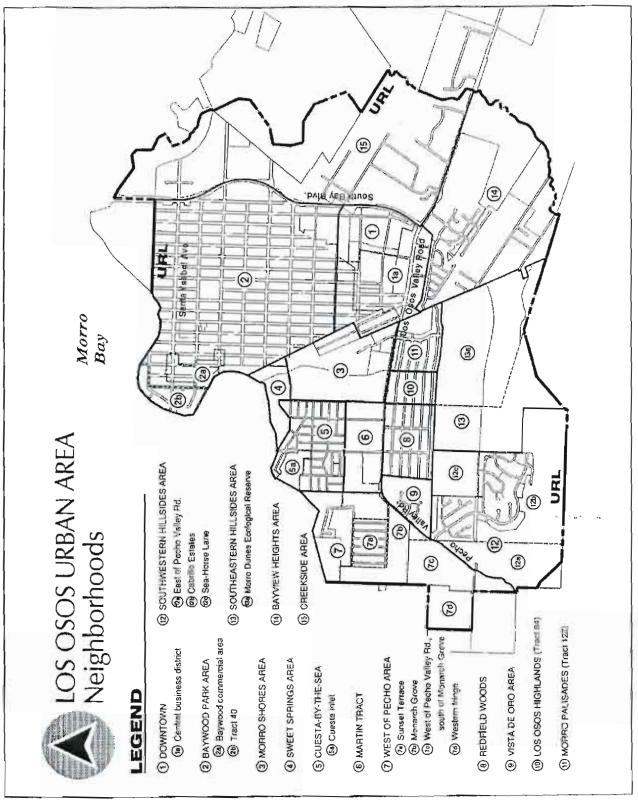


Figure 7-37: Los Osos Location Map

attack west 4

TABLE B – ABSORBTION CAPACITY ESTERO PLANNING AREA							
Land Use Categories	Rural Area	South Bay Los Osos	Cnyueos	Total			
Agricultural	1,900			1,900			
Rural Lands	94			94			
Residential Rural	104			1()4			
Residential Suburban	280	1,956		2,236			
Residential Single Tamily		19,416	2,791	22,207			
Residential Multi-Family		5,796	2,678	8,474			
Office and Professional		1,512	171	1,685			
ABSORPTION CAPACITY	2,378	28,688	5,642	36,708			
Existing Population	852	20,381	2,292	13,525			
•		14,440					
POTENTIAL ADDED	1,526	18,307	3,350	23,183			
POPULATION		14,248					

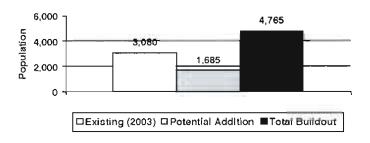
Potential population at building by land use category.

Does not include population of city of Morro Bay (8,876 in 1980).

attachment 5

Figure 2-7: Existing Population and Theoretical Potential at Buildout

Cayucos



Rural Area

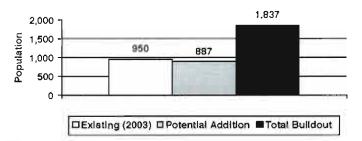


	Table A - Population Projections								
Estero Planning Area									
Year	Year Rural South-Bay Morro Bay Cayueos Planning % of								
	Area				Area	County			
1979	835	9,593	8,685	2,223	21,333	14.74			
1980	852	10,381	8,876	2,292	22,401	14.96			
1985	960	12,630	9.896	2,531	26,017	15.38			
1990	1,080	14,220	10,926	2,775	29,001	15.63			
1995	1216	15,700	11,940	3,001	31.857	15.74			
2000	1,369	17,334	13,047	3,246	34,996	15.88			

Table 2-5: Estimated Growth and Buildout¹

AREA	2003	2005	2010	2015	2020	2022
Cayucos	3,080	3,220	3,610	4,050	4,530	4,765 buildout in 2022 ²
Rural	950	990	1,110	1,250	1,400	1,460
Kutan	230))))	1,110	الحضرا	1,-470	1,837 buildout in 2031

1 Population estimates assume 2.3% annual growth rate,

- 2 Buildout estimate for Cayucos assumes 9.3% vacancy for existing development, 5% vacancy for future development, 2.09 persons per occupied dwelling unit
- 4 Buildout estimate for the Rural area assumes 100% occupancy and 2.67 persons per occupied dwelling unit

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POPULATION AND ECONOMY: POPULATION PROJECTIONS

Table 2-5: Estimated Growth and Buildout

AREA	2003	2005	2010	2015	2020	2022
Cayucos	3,080	3,220	3,610	4,050	4,530	4,765 buildout in 2022 ²
Los Osos	14,440	14,520	16,260	18,220	19,713 buildout in 2018 ³	19,713
				- Newton		1,460
"Rural	950	990	1,110	1,250	1,400	1,837 buildout in 2031 ⁴
Planning Area	18,470	18,730	20,980	23,520	25,530	25,800
	10,470	13,730	20,300	23,020	25,550	26,315 buildout in 2031

Population estimates assume 2.3% annual growth rate, except in Los Osos: assume 0.20% total population growth between 2002\and 2005 (the same rate as between 1997 and 2002); 2.3% per year thereafter

0:26

Buildout estimate for Cayucos essumes 9.3% vacancy for existing development, 5% vacancy for future development, 2.09 persons per occupied dwelling unit

³ Buildout estimate for Los Osos assumes 100% occupancy and 2.44 persons per occupied dwelling unit

Buildout estimate for the rural area assumes 100% occupancy and 2.67 persons per occupied dwelling unit