SAN LUIS OBISPO COUNTY
DEPARTMENT OF PLANNING AND BUILDING

VICTOR HOLANDA, AICP
DIRECTOR

August 31, 2009

Citizens for Affordable & Safe Environment
And Coalition for Low Income Housing
Attn: Al Barrow
1250 4t Street B
Los Osos, CA 93402

County Of San Luis Obispo
Department Of Public Works
Attn: John Waddell
INTEROFFICE

SUBJECT: APPEAL OF DRC2008-00103 – COUNTY OF SLO - LOWWP
HEARING DATE: August 13, 2009 / PLANNING COMMISSION

We have received your request on the above referenced matter. In accordance with County Real Property Division Ordinance Section 21.04.020, Land Use Ordinance Section 22.70.050, and the County Coastal Zone Land Use Ordinance 23.01.043, the matter has been scheduled for public hearing before the Board of Supervisors. A copy of the appeal is attached.

The public hearing will be held in the Board of Supervisors' Chambers, County Government Center, 1055 Monterey Street, Room D170,San Luis Obispo. The project has a hearing date of **Tuesday, September 29, 2009**. All items are advertised for 9:00 a.m. If you have any questions, you may contact your Project Manager, **Murry Wilson**. A public notice will be sent out and you will receive a copy of the notice.

Please feel free to telephone me at 781- 5718 if you have any questions.

Sincerely,

Nicole Retana

Nicole Retana,
County Planning and Building Department

CC: Murry Wilson, Project Manager
Jim Orton, County Counsel

SLO CNTY
PLANNING/BUILDING
DEPT

#198

COASTAL APPEALABLE FORM

San Luis Obispo County Department of Planning and Building 7/25/08 2009 AUG 27 PM 4:14

Please Note: An appeal should be filed by an aggrieved person or the applicant at each stage in the process if they are still unsatisfied by the last action.

PROJECT INFORMATION Name: LOS OSOS Wastewater Project File Number: DRC2008-00103

Type of permit being appealed:

☐ Plot Plan ☐ Site Plan ☐ Minor Use Permit ☐ Development Plan
☐ Variance ☐ Land Division ☐ Lot Line Adjustment ☒ Other: Public Facility

The decision was made by:

☐ Planning Director (Staff) ☐ Building Official ☐ Planning Department Hearing
☐ Subdivision Review Board ☒ Planning Commission ☐ Other _____
Date the application was acted on: AUG 13 2009

The decision is appealed to:

☐ Board of Construction Appeals ☐ Board of Handicapped Access
☐ Planning Commission ☒ Board of Supervisors

BASIS FOR APPEAL

☒ INCOMPATIBLE WITH THE LCP. The development does not conform to the standards set forth in the Certified Local Coastal Program of the county for the following reasons (attach additional sheets if necessary).
Explain: When an ALTERNATIVE is VIABLE THAT Reduces IMPACTS It should be CHOSEN.

☐ INCOMPATIBLE WITH PUBLIC ACCESS POLICIES. The development does not conform to the public access policies of the California Coastal Act - Section 30210 et seq of the Public Resource Code (attach additional sheets if necessary).
Explain: There is A Lower cost/impact ALTERNATIVE THAT SHOULD be ADDED BACK TO THE Design Build PROCESS

List any conditions that are being appealed and give reasons why you think it should be modified or removed. DOES NOT CONFORM TO LCP-COASTAL ACT

Condition Number Policy 1,2,5,11 Reason for appeal (attach additional sheets if necessary)
AND WATERSHED Pol 1

APPELLANT INFORMATION

Print name: (AL BARROW) Citizens for Affordable & Safe Environment & Coalition for Low Income Housing

Address: 1250 4th ST B LOS OSO CA 93402 Phone Number (daytime): 805 534-0800

I/We are the applicant or an aggrieved person pursuant to the Coastal Zone Land Use Ordinance (CZLUO) and are appealing the project based on either one or both of the grounds specified in this form, as set froth in the CZLUO and State Public Resource Code Section 30603 and have completed this form accurately and declare all statements made here are true.

Al Barrow
Signature

8-26-09
Date

OFFICE USE ONLY
Date Received: 8/27/09
Amount Paid: $8

By: Lois Macen, Secretary
Receipt No. (if applicable): N/A

SLO CNTY
PLANNING/BUILDING
DEPT
2009 AUG 27 PM 4:14

Citizens for Affordable and Safe Environment & Coalition for Low Income Housing (a California public benefit corporation)

August 26, 2009

Addendum to Coastal Appeasable Form

Glossary of expert testimony documents of Substantial issues supporting denial of permit DRC2008-00103 for LOWWP Gravity collection system and Biolac treatment. Cause for request is a significantly less costly and more protective viable alternative evaluated in the SLO County Fine Screening analysis of project option exists.

1. National Water research Institute Review of LOWWP
2. Soil Scientist and Lecturer on Los Osos Soils, aquifer and percolation rates
3. LCP for Los Osos is not certified Section 23.01.032-033,30328, Policy 1 preservation of Ground Water basin, Policy 2 Water extraction, Policy 3 monitoring resources, 23.07.172 Wetlands feasible to locate away from wetlands.
4. Prior Permit revocation Request complaint on project Many of those conditions have yet to be met or are promises to mitigate project impacts that are avoidable.. Which are vague without specifics to how mitigation is to be accomplished and monitored.
5. State Codes and Coastal Policies: Resources can be better protected by the Alternative Collection STEP/STEG and Ponds treatment.
6. Engineer's comments on exfiltration, infiltration, including trenching water losses for gravity collection maintenance from inadequate slope to move solids and insufficient flows. The loss to the basins potable water can be avoided by a STEP collection, which is, sealed 100%.
7. Graywater Impact to sewer flow is less flow will cause more inefficient movement of solids.
8. Infiltration and Inflow in Gravity sewer lines. Michael Saunders P.E. Orenco
9. Los Osos Soil Structure: will project remove Nitrates?
10. Dirt is estimated per yard to move cheaply making ponds and storage reservoirs least impact over concrete and steel structures.
11. Biosolids; Applicant has no place for them now, ponds and STEP do not produce biosolids for 30 plus years.
12. False and Misleading information: why the Commission should deny the permit. And STEP/STEG was promised to be in the Design/Build project bidding process.
13. Recharge of the Lower aquifer is myth not science. No mitigation for the seawater intrusion caused by this project.
14. More facts that the project does not stop seawater intrusion or mitigate it enough for a safe basin yield.
15. The STEP/STEG collection method cost is $44 million while reducing biosolids by 70%. This figure was not brought to the community.
16. Saving impacts and their mitigation is more germane to the Coastal Act than is gentrification of coastal communities.
17. a, b. Water Quality: Sewer effluent contains many carcinogens, mutagens and endocrine disrupters (EDCs) that should not be recharged into our drinking water aquifer. Recharge called disposal in this Broderson application will pollute our potable water supply. Classes as emerging contaminants by the USEPA there will

be MCL limits for them, extremely difficult and expensive treatment requiring brine hauling to Ventura brine facility, impacts that have not been defined. Orange County Water Factory One used tertiary treatment, reverse osmosis and advanced Oxidation Technology to remove dioxin-4 an EDC. We have evidence of these impacts in the aquatic biology in the Morro Bay Estuary from Dr. Lars Tomanek Ph.D. Toxicology Cal Poly SLO.

18. Coastal Commission Letter to Applicants "...designed and constructed in a manner that is consistent to the maximum extent required by law, with applicable land use and resource conservation policies." This request has not been complied with to date.

#1

NATIONAL WATER RESEARCH INSTITUTE

Final Report

of the

Independent Advisory Panel

on Reviewing the

Los Osos Wastewater Management Plan Update

December 4, 2006
Fountain Valley, California

Introduction

In August 2006, the Los Osos Community Services District (LOCSD) requested that the National Water Research Institute (NWRI) of Fountain Valley, California, organize an Independent Advisory Panel (Panel) to provide an independent review of the July 28, 2006, draft *Los Osos Wastewater Management Plan Update* (Plan Update), prepared by Ripley Pacific Company.

Los Osos, which has a population of over 15,000, lacks a centralized wastewater collection system and treatment facility. The community is served by septic tanks, leach fields, and cess pits. A number of studies have been conducted over the years, and several wastewater projects have been proposed. For a variety of reasons, no project has been constructed. The purpose of the review of the wastewater management plan was to provide an independent evaluation of the Plan Update project.

The Panel was organized to provide an independent, third-party review of the Plan Update. Panel members include:

- *Chair*: George Tchobanoglous, Ph.D., P.E., University of California, Davis
- Martin B. Feeney, P.G., CHG, Consulting Hydrogeologist (Ventura, CA)
- Robert Jaques, P.E., Private Consultant (Monterey, CA)
- Kenneth K. Tanji, D.Sc., University of California, Davis
- Valerie J. Young, AICP, Environmental Planner and Water Reuse Specialist (San Francisco, CA)

A description of NWRI is included in Appendix A. Short biographies on each Panel member are included in Appendix B.

The Panel held an initial conference call with the LOCSD district engineer and LOCSD consultants on October 25, 2006, to hear an overview presentation on the project in preparation for a November meeting in Los Osos.

The Panel later met with the LOCSD district engineer and LOCSD consultants in Los Osos, California, on November 8-9, 2006. The agenda for that meeting is included in Appendix C. The objectives of the Panel meeting included:

- Providing the Panel with appropriate context and background information regarding the Plan Update.
- Reviewing the assumptions, criteria, and findings of the Plan Update.
- Developing Panel findings and recommendations.

Representatives from the Central Coast Regional Water Quality Control Board (RWQCB) and the San Luis Obispo County Public Works Department (County) were invited by NWRI to attend the meeting. A list of meeting attendees is provided in Appendix C.

The Panel's comments, findings, and recommendations based on a review of written material, presentations, and discussions at the November 8-9, 2006, meeting in Los Osos, are presented in this report.

The report is organized into the following sections:

- Overview.
- Guiding Principles.
- Findings and Recommendations.

1. Overview

The Plan Update prepared by Ripley Pacific Company has provided an extremely valuable service to the Los Osos community by identifying alternative technologies and waste management opportunities that can be used to develop an overall integrated water management plan.

2. Guiding Principles

The Panel developed "Guiding Principles" to provide a perspective on the rationale for the Panel's Findings and Recommendations. While these principles are specifically directed at the Plan Update, they are based on knowledge that the Panel has accumulated from experience associated with planning and implementing wastewater collection, treatment, and reuse systems in California and elsewhere.

The Guiding Principles set forth by the Panel are as follows:

2.1 Doing nothing is not an option.

2.2 The continued use of individual septic tank/leachfield systems for a community of this size does not reflect the modern state of wastewater management.

2.3 Whatever wastewater management system is selected, careful attention must be devoted to the minimization of odors.

2.4 Recommended alternatives must solve the problems listed in paragraph 3.1 under "Findings and Recommendations."

2.5 The project must be implemented in a timely and cost-effective manner.

2.6 Given the many issues related to the wastewater management in Los Osos, it is imperative that priorities be established for project implementation. The first priority of the project must remedy the existing water pollution control problems. Secondary priorities may be incorporated to address other water

management issues, including effluent reuse and addressing saltwater intrusion.

2.7 Alternatives should be presented with sufficient detail in terms of description and estimated costs so that rational comparisons can be made.

2.8 The costs must be based on a better understanding of the elements for each alternative. Refined and updated cost estimates are needed for each alternative, so voters will understand the costs of what they are voting for under a required Prop 218 vote.

2.9 The solution to the saltwater intrusion problem should have lower priority relative to the resolution of wastewater compliance issues. However, the resolution of saltwater intrusion is recognized as a key element of the integrated water management plan.

3. Findings and Recommendations

3.1 What is the problem?

3.1.1 There is groundwater pollution from leaching of septic wastewater, as well as a rise in the shallow groundwater level due to septic system discharges.

3.1.2 The resulting pollution of the upper aquifer has forced the community to pump from the lower aquifer for water supply, which has resulted in overpumping of that aquifer, thus causing seawater intrusion in the deep aquifer zones.

3.1.3 Septic system discharges are polluting surface water supplies (for example, the Morro Bay shoreline).

3.1.4 RWQCB enforcement action is pending.

3.1.5 Los Osos has not corrected the problem for more than 30 years.

3.2 Collection Systems

3.2.1 The STEP/STEG system is a well-developed technology and is a viable alternative to the gravity collection system.

3.2.2 With both types of collection systems (i.e., STEP/STEG and conventional gravity with pump stations), it is imperative that the costs of connection from each home to the transmission line and the cost of property restoration be included in the total cost estimate for collection.

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3.2.3 Regardless of which type of collection system is selected, consideration should be given to the use of vacuum sewers in low lying areas along Morro Bay.

3.2.4 Clarifications of homeowner responsibilities need to be made for each collection option.

3.2.5 Clear delineation of annual capital and operating costs for every collection alternative should be set forth, so the least costly alternative can be identified.

3.2.6 The cost estimates for the collection system must be thorough and complete and include ongoing maintenance requirements for both the homeowner and the operating agency.

3.2.7 The economic benefits of septic tank pretreatment should be considered in the cost estimates for alternative treatment technologies. Such an analysis should also include the economic benefit of reduced biosolids production.

3.2.8 The economic benefits of reduced inflow and infiltration (I/I) achieved by the use of small-diameter effluent pressure collection should be considered in the cost estimates for alternative treatment technologies.

3.3 Treatment Plant Sites

3.3.1 There are two potential plant locations for the treatment facility: in-town or out-of-town, each with their own implementation challenges.

3.3.2 Given the number of problematic issues with the downtown site, it is the unanimous opinion of the Panel that an out-of-town site(s) is a better alternative.

3.3.3 If an out-of-town site is selected, a return line for recycled water that could be used for various applications within the community should be considered as part of an initial phase.

3.3.4 Because of the potential benefits and economic cost savings of constructing a return line concurrently with the collection system, the Department of Health Services (DHS)-required pipeline separation distance should be appealed.

3.4 Treatment Technologies

3.4.1 The least costly and most easily implemented solution would involve appropriate treatment out-of-town with land application (with spray irrigation). Reuse options could be added at a later date (phase) to return water for in-town landscape irrigation, for agricultural reuse, and for irrigation of cemeteries and playgrounds.

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3.4.2 Regardless of the type of treatment process selected, the process should be designed to allow for nitrogen removal, if needed.

3.5 Wastewater Disposal and Reuse

3.5.1 Effluent disposed by land application (i.e., spray irrigation) will not need to undergo nitrogen removal when applied at agronomic rates.

3.5.2 In the future, if water is used for agricultural purposes, preference should be given to non-food crops, such as turf grasses, pastures, and dry-land farmed crops, where less-restrictive Title 22 regulations apply. The removal of some nitrogen may be required for agronomic applications.

3.5.3 If the Broderson site is used for effluent disposal, it is important to evaluate compliance with the new DHS Groundwater Recharge Reuse criteria (because there is no vadose zone and there would be intentional recharge to the upper aquifer, which has historically been used for potable supply).

3.5.4 The beneficial use of treated effluent should be considered as part of a comprehensive Integrated Water Management Plan that should be developed concurrently with implementation of the Wastewater Management Plan.

3.5.5 Winter storage is required for land application, as well as for zero-discharge of effluent.

3.6 Public Communication Programs

3.6.1 There is no compelling evidence that either the County or LOCSD has a clear understanding of how the public views the various options and alternatives at this point in time.

3.6.2 A public outreach campaign is needed that leads to a positive Proposition 218 vote (property owners). Build a program around the people who support the need for a wastewater solution.

3.6.3 The County, in close collaboration with LOCSD, should assume the responsibility of being the source of credible information for the project.

3.6.4 There will be a need to develop a long-term communications program for wastewater management to build and maintain public support and acceptance for the project.

3.7 Permits and Schedule

3.7.1 Maximum use of the existing certified Environmental Impact Report (EIR) should be made for the out-of-town treatment plant site and disposal areas.

3.7.2 An Addendum to the EIR should be considered to expedite the California Environmental Quality Act (CEQA) process.

3.7.3 Discussions should be undertaken with the Coastal Commission to ensure that existing permits can be amended rather than applying for new permits.

3.7.4 The County needs to expedite the development and implementation of the wastewater management system to demonstrate to the RWQCB a commitment to fix the problems.

3.7.5 Every effort should be made to reestablish this project as a funding priority under the State Revolving Fund (SRF) program. Private financing may be considered for the project as an alternative to the SRF alternative.

3.7.6 The Central Coast RWQCB's 2010 compliance date appears to be somewhat arbitrary. The most optimistic estimate of the overall time period to complete the project is approximately 4 years:

- 1 year will be required to complete the planning process, including the Proposition 218 vote.
- 1 year to prepare the final design.
- 2 to 3 years for construction of the project (collection, treatment, and land application).

3.7.7 Opportunities for phasing the construction of the collection system should be evaluated.

3.8 Relationship of the Wastewater Project to Water Management Planning

3.8.1 The current Coastal Development Permit for the wastewater project requires that a wastewater management plan and a water management plan, as well as a habitat conservation plan (HCP), all be in place before additional connections can be made.

3.8.2 Completion of the wastewater management plan is an integral component in the development of the integrated water management plan.

3.8.3 The County should seek to secure funding under Proposition 50 and potentially Proposition 84.

Appendix A: National Water Research Institute

A 501(c)3 non-profit organization, NWRI was established in 1991 and is devoted to water education, research, and related activities. NWRI is governed by a Board of Directors consisting of representatives of six water and wastewater agencies in Southern California.

The mission of NWRI is to *create new sources of water supply through research and technology and to protect the freshwater and marine environments*. NWRI fulfills this mission by sponsoring cutting-edge research with a focus on practical results. NWRI also supports students though its many outreach programs; sponsors seminars, workshops, and conferences on critical issues facing the water community; and conducts Independent Advisory Panels for water and wastewater agencies and government agencies to provide a third-party review of plans and projects.

The only public-private partnership of its kind in the United States, NWRI receives its core funding from the Joan Irvine Smith & Athalie Richardson Irvine Clarke Foundation. NWRI leverages its resources through extensive collaborations with universities, federal and state agencies, and other associations and research organizations. Through these cooperative efforts, NWRI's has funded over 160 research projects with over 100 partners in the past 15 years, resulting in numerous peer-reviewed publications.

Appendix B: Panel Member Biographies

GEORGE TCHOBANOGLOUS, Ph.D., P.E. (Chair)
Professor Emeritus
University of California, Davis (Davis, California)

For over 35 years, wastewater expert George Tchobanoglous has taught courses on water and wastewater treatment and solid waste management at the University of California, Davis, where he is Professor Emeritus in the Department of Civil and Environmental Engineering. He has authored or coauthored over 350 publications, including 13 textbooks and five engineering reference books. Tchobanoglous has been past President of the Association of Environmental Engineering and Science Professors and currently serves as a national and international consultant to both government agencies and private concerns. Among his honors, he received the Athalie Richardson Irvine Clarke Prize from NWRI in 2003, was inducted to the National Academy of Engineers in 2004, and received an Honorary Doctor of Engineering degree from the Colorado School of Mines in 2005. Tchobanoglous received a B.S. in Civil Engineering from the University of the Pacific, an M.S. in Sanitary Engineering from the University of California, Berkeley, and a Ph.D. in Environmental Engineering from Stanford University.

MARTIN B. FEENEY, P.G., CHG
Consulting Hydrogeologist (Ventura, California)

Martin Feeney has been a consulting hydrogeologist since 1997, providing hydrogeologic consulting services to water agencies, private industry, and engineering firms. Prior to this, he served as hydrogeologist at various consulting firms such as Balanced Hydrologics, Inc. and Fugro West, Inc., where he provided analysis of groundwater basins, developed groundwater flow and transport, and developed saline groundwater source for desalination plants, injection wells/artificial recharge programs, and underground storage tank site assessment and remediation. He has been involved in numerous groundwater resources and water well projects throughout California, working for groups such as Monterey County, Salinas Valley, Santa Clara Valley Water District, Ventura County, and various others. Feeney received a B.S. in Earth Sciences from the University of California, Santa Cruz and an M.S. in Environmental Planning (Ground Water) from California State University.

ROBERT JAQUES, P.E.
Private Consultant (Monterey, California)

Bob Jaques has been a private engineering consultant since retiring from the Monterey Regional Water Pollution Control Agency in September 2005 after 30 years of service. During that time, he directed the planning, design, and construction of a wide-range of infrastructure projects, including a 30-mgd regional wastewater collection, treatment, and disposal system and a regional water recycling facility irrigating food crops. His areas of

interest include obtaining permits and approvals for various types of water and wastewater projects, and coordinating these activities with the County Health Department, the Regional Water Quality Control Board, and other regulatory agencies; preparing concept-level wastewater treatment alternatives studies; and preparing storm water programs, budgets, and work plans for Phase II storm water entities. He also continues to work part-time for the Monterey Regional Water Pollution Control Agency on certain projects and programs, including serving as the Program Manager for the regional storm water program of seven participating entities and five coordinating entities. Jaques received a B.S. and M.S. in Civil Engineering from the University of California, Berkeley.

KENNETH K. TANJI, D.Sc.
Professor Emeritus, Hydrology Program
University of California, Davis (Davis, California)

Ken Tanji retired from the University of California, Davis after 41 years as a Professor of Hydrology in the Department of Land, Air, and Water Resources. During that time, he had also served as Department Chair, Assistant Director of the University of California's Agricultural Experiment Station, and Director of the Kearney Foundation of Soil Science. He is internationally recognized in water-quality aspects of irrigation and drainage, and is the editor of the manual, *Agricultural Salinity Appraisal and Management*, published by the American Society of Civil Engineers. Currently, he heads a team developing a *Salinity Guide for Irrigation of Landscapes with Recycled Water* in the Los Angeles-San Diego corridor. Tanji received a B.A. in Chemistry from the University of Hawaii, an M.S. in Soil Chemistry from the University of California, Davis, and a D.Sc. in Irrigation, Drainage and Hydrological Engineering from Kyoto University in Japan.

VALERIE J. YOUNG, AICP
Senior Environmental Planner and Water Reuse Specialist (San Francisco, California)

Valerie Young is a senior environmental planner and water reuse specialist with over 26 years of professional planning experience, having spent 10 years working in the public sector and 15 years working as a consultant with CH2M HILL in California and The Louis Berger Group in New York. Currently, she has an independent consulting practice. Since 1993, she has focused her environmental planning work on recycled water and water-related projects in California. Her primary role has been to shepherd these projects through the environmental review process, preparing environmental documents and addressing community and agency concerns. She was also worked closely with engineers to ensure mitigation measures are incorporated into recycled water projects during design, construction, and operation. Young received a B.A. in History from the University of California, Santa Barbara, and an M.A. in Geography/Planning from Arizona State University.

Appendix C: Panel Meeting Agenda

NWRI Independent Advisory Panel Meeting: Los Osos Wastewater Management Plan Update Review

FINAL Meeting Agenda November 8-9, 2006

Meeting/Hotel Location
Sea Pines Resort
1945 Solano St.
Los Osos, CA 93402
(805) 528-5252

On-Site Contacts
Tammy Russo (NWRI)
Cell: (714) 614-7386
Jeff Mosher (NWRI)
Cell: (714) 705-3722

Meeting Objectives:

1. Provide panel with appropriate context and background information regarding the DRAFT Los Osos Wastewater Management Plant Update.
2. Review the assumptions, criteria, and findings of the Plan Update.
3. Develop panel findings and recommendations.

Wednesday, November 8, 2006

8:30 - 11:00 am	**Tour of Project Sites**	
11:15 - 11:30 am	Welcome and Introductions - Jeff Mosher (NWRI) - George Tchobanoglous (Panel Chair)	
11:30 - 12:00 noon	Status of Project	Rob Miller (LOCSD)
12:00 - 1:00 pm	**Lunch**	
1:00 - 2:30 pm	Discussion Questions: - General - STEP/STEG - Site Selection - Environmental and Public Acceptance - Agricultural Users - Agricultural Use Plan - Treatment Technologies - Storage - Costs - Other?	George Tchobanoglous
2:30 - 2:45 pm	**Break**	
3:00 - 4:00 pm	Discussion - Continued	
4:00 - 5:30 pm	**Panel Only Discussion**	

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Thursday, November 9, 2006

8:30 - 10:30 am	Panel Discussion with Consultant Team	George Tchobanoglous (Panel Chair)
10:30 - 10:45 am	**Break**	
10:45 - 12:00 noon	Panel Only Discussion	
12:00 - 1:00 pm	**Lunch**	
1:00 - 2:30 pm	Panel Only Discussion	
2:30 pm	**Adjourn**	

Appendix D: List of Attendees at November 8-9, 2006, Panel Meeting

Panel Members:

- *Chair*: George Tchobanoglous, Ph.D., P.E., University of California, Davis
- Martin B. Feeney, P.G., CHG, Consulting Hydrogeologist (Ventura, CA)
- Robert Jaques, P.E., Private Consultant (Monterey, CA)
- Kenneth K. Tanji, D.Sc., University of California, Davis
- Valerie J. Young, AICP, Environmental Planner and Water Reuse Specialist (San Francisco, CA)

NWRI Staff:

- Jeffrey J. Mosher, Executive Director
- Gina Melin, Communications Specialist
- Tammy Russo, Administrative Coordinator

Los Osos Community Services District and Consultants:

- Robert S. Miller, P.E., District Engineer (Wallace Group)
- Dana K. Ripley, P.E. (Ripley Pacific Company)
- Sean Tobin (MVE, Inc./RPC Team)
- Ryan Vance, PLS (MVE, Inc./RPC Team.)
- Joe Leach, PE (MVE, Inc./RPC Team)
- Jeff Palin (MVE, Inc./RPC Team)

San Luis Obispo County Public Works Department Staff and Consultants:

- Paavo A. Ogren, Deputy Director
- Lou Carella P.E. (Carollo Engineers)
- Karl W. Hadler, P.E. (Carollo Engineers)

Central Coast Regional Water Quality Control Board:

- Matt Thompson, P.E., Water Resource Control Engineer
- Allison Dominguez, Environmental Scientist

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(714) 378-3278
(714) 378-3375 (fax)
www.NWRI-USA.org

#2

Dear Members of the Planning Commission,

My name is Larry Raio. I have lived in Los Osos over 30 years. I am currently a lecturer at Cal Poly teaching classes in both Soil Mechanics and Soil Science. I have worked as a staff engineer, laboratory manager, and drill rig operator for a local geotechnical engineering firm with over 22 years of experience. I have drilled hundreds of holes in Los Osos to determine depth to groundwater and for percolation rates. I have also helped design over 100 on-site sewage disposal systems, many of them in the Los Osos area.

I am very concerned with how the sewer and water issues are being addressed by the county. As stated in the DEIR, the county is determined to resolve the sewer issue separate from the water issue, and I think this is a huge mistake. I feel that the sewer issue can be and must be used to help solve the water issue.

Water is critical to life, and if you just look at California's current water problems, it has never been more evident that each drop is precious. The Sacramento delta has been shut down and there is no water for many farmers to grow crops. The local jurisdictions who have opted to receive imported water are not going to get their allotted amounts.

Los Osos is in a perfect situation right now to get it right, but it appears to be going very wrong. We have and excellent system set up right now to provide a sustainable source of water to our community into the unforeseeable future. Part of this sustainability relies on the leachfields that are uniformly spread over the community's watershed and act to recharge the upper ground water sources uniformly, not localized.

We could not ask for a better soil to not only dispose of treated effluent, but for also cleaning that effluent up. The Los Osos soils have great absorption characteristics and excellent filtering capacity.

The only thing that the Water Quality Control Board (WQCB) has charged Los Osos with is polluting the upper aquifer with excess nitrogen from leachfields. This has not been scientifically been proven, only assumed.

The first study that was done that showed apparent evidence that leachfields were contaminating the groundwater was back in 1982. At that time there was federal grant money available to communities for sewage treatment plant with 50% matching funds. The County of SLO felt that because of the high population levels and continuing growth of Los Osos that they definitely could use a treatment plant. Using federal grant money would be a cost effective way of providing one. The only obstacle to obtaining the money was they had to prove that sewage treatment plant they needed by showing evidence of groundwater contamination. To that end, the county hired the firm Brown and Caldwell to perform the study, but with the guise of saving money, the county made a deal with Brown an Caldwell, that they would perform all the

sampling and lab testing of the water samples. The results of these tests were then given to Brown an Caldwell for interpretation and final report. This is a typical "fox watching the hen house" situation and should never of been allowed and neither should the results be trusted.

I personally drilled and installed the monitoring wells for this study and can attest to the poor quality of the wells for use for monitoring purposes. We were instructed to drill 10-feet into the first ground water detected, which in many instances were relatively shallow (above 25-feet) which were perched waters not considered to be a part of the "Upper Aquifer". 10-feet of slotted perforated pipe was placed in the hole followed by solid pipe to the surface. Gravel was placed around the pipe to above the slots, 2-feet of bentonite clay placed on top of the gravel, and the holes were backfilled with native sand. The were no sanitary seals placed at the ground surface. A hand bailer with a rope attached was left in each well for purging and sampling the water. There was no protection provided to prevent the bailer rope from contaminating the well water from surface soil when the excess rope was laid on the ground surface. This surface soil can be a source of nitrogen. The person in charge of the lab was Perci Garcia. He was in charge of taking the samples and testing them. A few years ago, I was talking with a friend who used to live in Los Osos who now lives out of town, and I was discussing the situation in Los Osos in to her. She told me that she used to work in Garcia's lab and that she has seen him falsify data on numerous occasions. It finally dawned on me as to why the county wanted to do the testing, and it was because they needed the study to show we were polluting the groundwater in order to get the funding. The only problem was that once the study was completed, the funding was gone. But the bigger problem was now we had a study that said we were polluting the groundwater and the WQCB stepped in and said we had to fix it. That's when the building moratorium was put into place.

There is evidence through historical data and isotope studies that not only has there been similar levels of nitrogen in the groundwater well before the current build out of homes and leachfields but that those levels haven't change much in the past 25 years; if anything the levels appear to dropping. Isotope studies can be used to determine if the source of the nitrogen is from residential sewage or other potential sources such as horses, cattle or agriculture, which were all present when Los Osos had a very low population. In 1987, the county hired Dr. Roy Spaulding to conduct an isotope study to these ends, and the conclusions indicated that the nitrogen found in the samples were not entirely from septic systems. This information was suppressed by the county and by the WQCB. The WQCB did n not even admit to seeing this information until it was shown that they were copied the information and did indeed have. I can only conclude from this, that this is not what they wanted to hear because it didn't help their case and they preferred that no one hear about it.

The biggest issue right now is that we are over drafting the lower aquifer and are fighting saltwater intrusion. The county's direction is to try and recharge this aquifer from the Broderson site. The

effectiveness of this option is questionable at best with very little scientific data supplied as proof that it will recharge the aquifer. Their guess is that only 8% of the water used will recharge the basin. The water must go through an 80-foot think lense of clay to get into the lower aquifer. I have seen no data on the permeability rates of this lense. I have run these types of tests in my lab and found that clay typically have permeability rates of greater than 10^{-8} cm/sec. Basically, if you had a core sample being tested and put 100 psi water pressure on top of it, you would only see about a drop of water per hour or a few drops per day come out of it. It will take thousands of years to get the water through that lense. Again where's the scientific data to back it up.

I proposed that we start using the upper aquifer water again. This water can be made potable for as little as $0.60 per 1000 gallons through ion exchange. The water could also be used in a purple pipe system for irrigating our landscapes. We don't even have to take the nitrogen out or treat it at all for that matter. Remember, nitrogen is fertilizer, so if we add nitrogen rich water to our landscapes, we won't have to directly apply as much fertilizers. The key here is that for every gallon of water pumped from the upper aquifer that is one gallon not being pumped from the lower aquifer. This is the equivalent of 100% recharge; no guessing, no questions; 1:1. Isotope studies have shown that the water in the lower aquifer is between 4-7,000 years old. Should I be using pure ancient water for watering my lawn? I truly wish I wasn't. I would like to have the choice not to.

The existing leachfields provide a perfect way of recycling this water into the upper aquifer and spreading this recharge over the entire community. The system is already in place and working. If it's not broken, don't fix it. We just need to see it with a different set of eyes to see that it is not broken. It's been about 24 years since the building moratorium. Has anybody been caused harm from the apparent problem that we have? Supervisor Gibson states that we are in a state of emergency, but doesn't state what that emergency is. I don't see it. I would like the points listed with scientific data to back it up.

With groundwater to bottom of leachfield separations as little as 3-feet, studies show that with similar soils, 90 to 99% of the nitrogen is removed, proving that leachfields are very effective in removing nitrogen. There are some areas in Los Osos where we don't have this much separation. These areas need to be identified and fixed in the best way possible. Studies show also that 100% of coliform is removed in the soil below the leachfield. Los Osos has been blamed for polluting Morro Bay with coliform, but evidence points mostly towards the Men's Colony and the overflowing of their wastewater treatment plant during heavy rains annually for the past 15 years. Now that this has all been cleaned up, the bay has a clean bill of health and the oyster farm is up and running providing clean oysters to their customers. Nothing has changed in Los Osos.

From a soils standpoint, another problem I have is with the gravity pipe they want to install. The DEIR

states that nearly 100% of the project has a very high to high potential for liquefiable soils. They also state that a study will be done to see what mitigation steps can be taken to reduce the potential of pipe failure due to liquefaction. The science clearly shows that the larger and heavier the pipe, the more potential there is for damage or failure of the pipe. Damage of the pipe means there will be raw sewage potentially contaminating our groundwater. They are assuming here that the situation can be mitigated, which with my background, I know it cannot be totally mitigated against. One thing I do know, it that the cost to mitigate against liquefaction will be sizable and is still not a guarantee that breakage won't happen. Once the mitigation measures are determined there will be a sizeable increase in cost and we have no idea at this point what that is going to be. The report should be made and cost estimates given before approval of this project. A project should not cause a higher concern for pollution than what already exists. Just looking locally, most of the sewage pollution to our waterways has come from sewage treatment plants and their delivery systems, and now we want to build another one? The EPA States "Old and leaking sewer pipes may pose a serious threat to the nation's groundwaters. A limited review of information on exfiltration suggests that the range of raw sewage loss to the underground environment is generally between 10 to 25 percent of the total annual flow of sewage through sewer collection systems". This means we are almost guaranteed that leakage will occur, and a lot of it at that. This is totally unacceptable for Los Osos and presents the potential to cause more problems than currently exists. We don't need to look far to see the effects of earthquakes on large gravity pipe systems. The 1994 earthquake in Northridge caused over billions of dollars in damage and took approximately 13 years to fix. The other problem here, was that the pipes continued to leak until the could be fixed, some for up to 13 years. This cannot be allowed in Los Osos. We need to know a plan of action which states how long it will take to fix the pipes and what the cost will be. Many of these pipes will be extremely deep, and if they break, the cost to fix them will be extremely high. Not to mention the streets will be dug up making it difficult for homeowners to get in and out of their home. The fact is that when the pipes fail, the adverse effect of the leaking pipes in sandy soils is going to greatly exceed the effect of having some nitrogen in our groundwater.

A big problem in Los Osos is the all these statements are being made, blaming us for this or that, but there never is the scientific data to prove it. And when scientific data is used to prove something they don't want to hear, it is ignored. We have been putting up with this double standard for years, and it needs to stop. We need a system that serves the Los Osos community, and one that is affordable and sustainable.

Conclusion:

Los Osos has been charged with polluting the upper aquifer with nitrogen. That water is not causing harm to people or the environment. There is no scientific data that prove the nitrogen levels as monitored from wells are all derived from leachfields. Lets pump the upper aquifer water, make it potable, save our lower aquifer and stop saltwater intrusion. Leave the leachfields with adequate groundwater separations in place

and fix the ones without proper separation. This gives the best dispersal of the water, spreading it uniformly over the entire community. This will provide Los Osos with a sustainable water supply that the rest of the people in the county, and for that matter, the state of California, will be envious of, and for a lot less money! The proposed plan to recharge the lower aquifer from the Broderson site will not work in my opinion and is a total waste of money. If the sewer is necessary, we need the total cost of the gravity pipe system, including the costs of the proposed mitigation measures for the known high liquefaction potential. When an earthquake hits, I guarantee pipes will be broken due to liquefaction even with the mitigation measures. When the pipes break, raw sewage will be spilled. We will end up with a much bigger problem than the perceived problem we currently have. I already have a huge problem with the cost of this project, but these added costs scare the hell out of me.

Larry Raio

#3

23.01.032 - 033 NOT Certified

b. Proposals pending at time of LCP certification:
(1) Any development proposal which the county approved before certification of the Local Coastal
Program but which has not been submitted to the Coastal Commission for approval shall be
re-submitted to the county through an
application for a permit pursuant to this title. The decision on the application shall be based solely
on the requirements of this title.
(2) Any development proposal which the county approved before certification of the Local Coastal
Program and for which an application has been filed with the Coastal Commission may, at the
option of the applicant, remain with the Commission for completion of review and permit
issuance. Commission review of any such application shall be based on the provisions of the certified Local Coastal Program. Alternatively, the applicant may re-submit the proposal to the
county through an application for a permit pursuant to this title, and the decision on the
application shall be based solely on the provisions of this title.
Projects which elect to obtain a
coastal permit from the Coastal Commission will remain under the jurisdiction of the Commission

Section 30328 Violations; remedies
If a violation of this article occurs and a commission decision may have been affected by the violation, an aggrieved person, as described in Section 30801, may seek a writ of mandate from a court requiring the commission to revoke its action and rehear the matter. (Added by Ch. 1114, Stats, 1992.)

Policy 9: Construction Requirements
In sensitive resource areas the extent of construction and ground surface disturbance shall be reduced to a
minimum by restricting construction activities and equipment within narrow, limited and staked work corridors

and storage areas. [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD.]

Policy 7: Permit Requirements
The county shall require a permit for all public works projects located within the coastal zone except:

Policy 9: Review of Treatment Works
For any development that constitutes a treatment works (PRC 30120), issuance of a permit shall be consistent with the certified LCP and PRC 30412 and shall address the following aspects of such development:
a. The siting and visual appearance of treatment works within the coastal zone.
b. The geographic limits of the service area within the coastal zone which is to be served by the treatment works and the timing of the extension of services to allow for phasing of development consistent with the certified LCP.
c. Projected growth rates used to determine the sizing of treatment works.
[THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD.]

NOT SUS STANDARD

POLICIES FOR COASTAL WATERSHEDS
To implement the provisions of the Coastal Act regarding watershed management, the following policies represent a commitment that all new development ensure watershed protection.
Policy 1: Preservation of Groundwater Basins
The long-term integrity of groundwater basins within the coastal zone shall be protected. The safe yield of the groundwater basin, including return and retained water, shall not be exceeded except as part of a conjunctive use or resource management program which assures that the biological productivity of aquatic habitats are not significantly adversely impacted. [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD.]
Policy 2: Water Extractions
Extractions, impoundments and other water resource developments shall obtain all necessary county and/or state

permits. All pertinent information on these uses (including water conservation opportunities and impacts on in-stream beneficial uses) will be incorporated into the data base for the Resource Management System and shall be supplemented by all available private and public water resources studies available. Groundwater levels and surface flows shall be maintained to ensure that the quality of coastal waters, wetlands and streams is sufficient to provide for optimum populations of marine organisms, and for the protection of human health. (Public works projects are discussed separately.) [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD.]

Policy 3: Monitoring of Resources

In basins where extractions are approaching groundwater limitations, the county shall require applicants to install monitoring devices and participate in water monitoring management programs. [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD AND PURSUANT TO SECTION 8.40.065 OF THE COUNTY CODE (WATER WELL REGULATIONS).]

*Footnote: The LOWWP did not comply with the conditions of the Coastal Development Permit no HCP in place 85 total

No earthquake recovery plan 6.8 Los Osos and 7.3 Hosgri faults within 10 miles

(2) If the determination of the Planning Director is challenged by the applicant or an interested person, or if the county wishes to have a determination by the Coastal Commission as to the appropriate designation, the Planning Director shall notify the Coastal Commission by telephone of the dispute/question and shall request an Executive Director's opinion.

Processing of appeals:

(1) Timing and form of appeal. An appeal shall be filed within 14 days of the decision that is the

subject of the appeal, except where otherwise provided in this title, using the form provided by the
Planning Department in addition to any other supporting materials the appellant may wish to
furnish, explaining the reasons for the appeal. An appeal shall be filed with the Planning Director,
who shall process the appeal pursuant to this section, including scheduling the matter before the
appropriate hearing body.

Does NOT

d. Grounds for appeal. As required by Section 30603 of the Public Resources Code, the grounds for appeal
pursuant to this section shall be limited to an allegation that the development does not conform to the
standards set forth in the certified Local Coastal Program or the public access policies set forth in the
California Coastal Act (Section 30210 et seq. of the Public Resources Code).
The grounds for appeal of a denial of a permit pursuant to section c(5) (Major Public Works or Major
Energy Facility) shall be limited to an allegation that the development conforms to the standards set forth
in the certified Local Coastal Program and the public access policies set forth in the California Coastal Act
(Section 30210 et seq. of the Public Resources Code).
23.01.043 - 045
COASTAL ZONE LAND USE ORDINANCE
REVISED JANUARY 2009
1-17 ENACTMENT, ADMIN & AMENDMENT
e. Time for appeal to Coastal Commission. Any final action by the county on an appealable development
shall become effective after the 10-working day appeal period to the Commission in accordance with the
requirements of Section 23.02.039 and applicable provisions of the Coastal Act.
f. Notice to county of appeal to Coastal Commission. An appellant shall notify the county when
appealing to the Coastal Commission by providing the county a copy of the information required in Section
13111 of Title 14 of the California Code of Regulations.

23.02.026 - Review by Other Agencies:
Planning Department review of applications filed pursuant to this chapter will include notification of the following agencies. The purpose of notification is to inform interested agencies of proposed projects that may affect their jurisdictions so that such agencies may provide comments on significant development proposals.

a. Air Pollution Control District (APCD): To be notified as set forth in Section 23.06.082 (Air Pollution Control District Review).

b. California Coastal Commission: To be notified of Minor Use Permit and Development Plan applications and proposed amendments to the Local Coastal Program.

c. Engineering Department: The county Engineering Department is to be notified of all Minor Use Permit and Development Plan applications regarding matters of drainage, flood hazards, water and sewer facilities, public street access and improvements, and surface mining operations conducted on behalf of the county.

d. Fire Department: County fire protection agencies including the county Fire Department, the various county fire protection districts and the California Department of Forestry are to be notified of all Minor Use Permit and Development Plan proposals within their respective jurisdictions.

e. Health Department: The county Health Department is to be notified of land use proposals pursuant to Section 8.06.010 (Construction Plans Required) of the County Code, or any case where a proposed use will involve toxic or hazardous materials in larger than household quantities.

f. Incorporated cities: The incorporated cities of the county are to be notified of all Minor Use Permit and Development Plan proposals in or within one mile of their respective urban reserve lines, or other area defined by agreement between the county and city.

g. Regional Water Quality Control Board: To be notified as set forth in Section 23.06.100 (Water Quality).

h. Special Districts: Including community services districts, school districts and sanitary districts are to be
notified in the same manner as incorporated cities.
i. Public Utilities: Public utility companies including but not limited to providers of water, gas, telephone
and electrical services are to be notified of all Minor Use Permit and Development Plan applications.
[Amended 1995, Ord. 2715]

23.02.036 - Final County Action on Development Permits.
After the Review Authority has acted on an application for development, the requirements of this section apply.
a. Notice of Final County Action. Within seven calendar days of county completing its review and meeting
the requirements of subsection c. of this section, the county shall notify by first class mail the Coastal
Commission and any persons who specifically requested notice of such action by submitting a
self-addressed, stamped envelope to the county (or, where required, who paid the fee established by the
PERMIT APPLICATIONS 2-18 COASTAL ZONE LAND USE ORD.
REVISED JUNE 2004
23.02.036
County Fee Ordinance to receive such notice) of its action. Such notice shall include conditions of
approval and written findings and the procedures for appeal of the county decision to the Coastal
Commission

c. Finality of county action. A county decision on an application for a development shall not be deemed
final until:
(1) The county decision on the application has been made and all required findings have been adopted,
including specific factual findings supporting the legal conclusions that the proposed development
is or is not in conformity with the certified Local Coastal Program and, where applicable, with the
public access and recreation policies of Chapter 3 of the Coastal Act (these can be found in Section

23.04.420 of this title and Sections 30210 through 30224 of the California Coastal Act); and
(2) When all county rights of appeal have been exhausted as set forth in Section 23.01.043b
(Exhaustion of county appeals).
(3) For actions on Land Use Permits that are not appealable to the Coastal Commission under the
standards of Section 23.01.043c, the Coastal Commission has received notice of Final County
Action as required by parts a and b of this Section; and
(4) For actions on Land Use Permits that are appealable to the Coastal Commission pursuant to
Section 23.01.043c, the standards set forth in Section 23,02,039 have been satisfied.
[Amended 1995, Ord. 2740; 2004, Ord. 3001]

23.02.039 - Effective Date of Land Use Permit for an Appealable Project.
A decision by the county on an appeal (Section 23.01.042), Variance (Section 23.01.045), Minor Use Permit (Section
23.02.033) or Development Plan (Section 23.02.034), or for a project that is appealable to the Coastal Commission
pursuant to Section 23.01.043 shall become effective after the 10 working day appeal period to the Commission
has expired unless either of the following occur:
a. An appeal is filed in accordance with Section 13111 of Title 14 of the California Administrative Code.
b. The notice of final county action does not meet the requirements of Section 23.02.036.
When either of the circumstances in this section occur, the Coastal Commission shall, within five calendar days of
receiving notice of that circumstance, notify the county and the applicant that the effective date of the county action
has been suspended.

d. Time extensions on permits issued by the Coastal Commission. A time extension on a coastal
development permit issued by the Coastal Commission shall only be granted by the Coastal Commission.

23.04.031 - Public Facilities Category.
When a proposed land division in a Public Facilities land use category is for the purpose of continuing use as a Public Facility, the minimum parcel size may be 6,000 square feet or larger, as needed for the land use, pursuant to Section 66428 of the Subdivision Map Act. The mini-mum size of a division for the purpose of sale for private use shall be determined through Land Use Element amendment to designate an appropriate land use category for private use.

23.07.010 - Purpose:
Combining designations are used to identify and highlight areas of the county having natural or built features which are sensitive, hazardous, fragile, of cultural or educational value, or of economic value as extractable natural resources. The purpose of combining designation standards is to require project design that will give careful consideration to the land features, structures and activities identified by the combining designations. These standards provide for more detailed project review where necessary to support public safety or proper use of public resources, or to satisfy the requirements of the California Coastal Act and the Local Coastal Plan, the certified Land Use Plan of the San Luis Obispo County Local Coastal Program.

23.07.172 - Wetlands. EMART IS UNNECESSARY
Development proposed within or adjacent to (within 100 feet of the upland extent of) a wetland area shown on the Environmentally Sensitive Habitat Maps shall satisfy the requirements of this section to enable issuance of a land use or construction permit. These provisions are intended to maintain the natural ecological functioning and productivity of wetlands and estuaries and where feasible, to support restoration of degraded wetlands.
a. Location of development: Development shall be located as far away from the wetland as feasible, provided that other habitat values on the site are not thereby more adversely affected.

Impacts Avoidable

Section 3:
Adverse Project-Specific and Cumulative Impacts Which Cannot Be Mitigated to a Level of Insignificance

3.1.1 - Agricultural Resources

Q5.11-A: The project will convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use, and pursuant to standards established by the California Coastal Commission.

Potentially Significant and Unavoidable Impact

The Project's proposed treatment plant at Giacomazzi will result in a significant and unavoidable impact to the conversion of farmland.

The proposed facilities for the treatment for the project will be located on the Giacomazzi Site. The facility will encompass approximately 16 acres of the approximate 38-acre site. The proposed treatment plant facilities will result in direct impacts on 16 acres of land that is or could be used for crops and indirect impacts on seven additional acres of land; however, this 7-acre area at the northeast corner of the Giacomazzi has not and cannot be used for crops. This conversion of land will result in a revenue loss of approximately $94,200 assuming
vegetable crops. Therefore, the implementation of treatment plant at the Giacomazzi site will result in a potential significant farmland conversion impact.

Finding

Pursuant to California Environmental Quality Act Guidelines Section 15091 (a)(3),
specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible mitigation measures or alternatives identified in the Final Environmental Impact Report.

Facts in Support of Finding

The potentially significant effect has been reduced to the maximum extent feasible
by virtue of the following mitigation measure as identified in the Final Environmental Impact Report and incorporated into the project and will substantially lessen the significant effect of the project on farmland conversion; however, the level of impact due to the conversion of agricultural land will still be considered significant and unavoidable.

5.11-A1 Prior to operation of the facility, the County Department of Public Works shall provide evidence to the County Planning and Building Department that a farmland conservation easement, a farmland deed restriction, or other farmland conservation mechanism has been granted in perpetuity to the County or a qualifying entity approved by

the County Agricultural Commissioner (or designee). The easement shall provide conservation acreage at a ratio of not less than 2:1 for the loss of agricultural land. Additionally, the project proponent shall

provide appropriate funds (as determined by the County Planning Department) to compensate for reasonable administrative costs incurred by the easement holder. The area conserved shall be minimally sized at 16 acres, and shall be of a quality that is reasonably (as determined by the County Agricultural Commissioner or designee) similar to that of the farmland within the project limits.
The implementation of the above mitigation measure will reduce and substantially
lessen potential impacts from the project on farmland. However, the level of impact due to the conversion of agricultural land is still considered significant and unavoidable.
Alternative locations for the treatment plant facilities are considered throughout the
Final Environmental Impact Report, Rough Screening Report and Fine Screening Report. A screening analysis was conducted as described in Section 7 of the Draft
Environmental Impact Report to identify the sites that could feasibly accomplish the fundamental goals of the project while minimizing environmental impacts. The
wastewater treatment plant sites that were determined to be feasible are located east of Los Osos Creek. As described in the Draft Environmental Impact Report, Los Osos Creek establishes the dividing line between agricultural land uses to the
east and environmentally sensitive habitat areas to the west. In 2001, the Los Osos Wastewater Project was approved and the proposed treatment plant was located west of Los Osos Creek at the Mid-Town site (known as the Tri-W site). However, shortly after construction began, the majority of the Los Osos Community Service District board members were recalled and the new board members immediately halted construction on the wastewater project. This action demonstrated that the placement of a wastewater treatment plant west of Los Osos Creek will not be feasible from a social (community) standpoint. Further, cost estimates contained in the Fine Screening Report show that a treatment plant
west of Los Osos Creek would cost at least 25 million dollars more, owing to the treatment technologies required for an in-town treatment plant. Therefore, feasible
locations east of Los Osos Creek were reviewed for the location of a wastewater treatment plant.
In evaluating potential sites for the proposed treatment plant facilities, various constraints were identified. These constraints are shown on Exhibit 5.1-1 in the Draft Environmental Impact Report and include the following:
□ No treatment plant will be located on slopes greater than 10 percent due to the need for substantial grading for treatment plant facilities.
□ No treatment plant will be located within an Environmentally Sensitive Habitat Area or a Sensitive Resource Area as defined by County of San Luis Obispo.

ADD 3.2

□ No treatment plant facilities will be located on or within existing urban areas.
As discussed in the Draft Environmental Impact Report, the unconstrained areas were evaluated next to determine prime agricultural and non-prime agricultural. This evaluation utilizes the California Coastal Commissions definition of prime farmland. Farmland is considered Prime Farmland under the California Coastal Commission definition when one of the four following criteria is met:
□ The soils are classified as Class I and/or Class II irrigated soils.
□ The soils have an 80 to 100 Storie Index rating.
□ The land has a gross crop return of $200 or more per acre per year.
□ The land has an annual carrying capacity of one animal unit per acre per year.
Based on the above definition, there are no substantial areas within the Los Osos valley floor that are classified as non-agricultural land. Areas classified as nonprime
agricultural land were reviewed to determine whether there are feasible, alternative locations for the proposed treatment plant facilities. Large areas classified as prime agricultural land were not reviewed because the objective of the analysis is to reduce the potential impact of the proposed facilities on prime agricultural land while taking into consideration various environmental constraints.
As discussed in the Final Environmental Impact Report, one area with adequate acres and classified as non-prime agricultural land includes the series of parcels east of the cemetery parcel known as the Andre, Robbins 1, and Robbins 2 parcels, as well as one additional parcel east of the Robbins 2 parcel. The Andre, Robbins 1, and Robbins 2 parcels constitute a series of parcels identified as an alternative for treatment plant facilities in Section 7 of the Draft Environmental Impact Report.
The area east of the cemetery parcel is primarily classified as non-prime agricultural land. These parcels encompass approximately 128-acres; however, 46-acres include environmental constraints such as an environmentally sensitive habitat area. The area outside of the environmental constraints encompasses approximately 63-acres of non-prime agricultural land and 0.09-acre of prime agricultural land. This area could accommodate treatment plant facilities of approximately 20 acres. However, the area is adjacent to Los Osos Valley Road on the south and Warden Creek wetlands on the north. Issues related to using this alternative location for the treatment plant include:

□ These parcels are owned by private individuals that do not want to sell their property. Therefore, the County would be required to obtain the property through eminent domain.
□ The area is located immediately adjacent to Los Osos Valley Road and will result in a significant impact on views.
□ Los Osos Valley Road is proposed as a "scenic corridor" and the placement of treatment plant facilities adjacent to this roadway will not be consistent with a scenic corridor designation.
□ The placement of treatment plant facilities in close proximity to

A00 3.3

Warden Creek wetlands reduces the project's ability to contain spills before material enters the creek and sensitive wetlands.
Due to these issues, the County considers the aforementioned parcels unable to accommodate the proposed treatment plant facilities.
The Tonini site is a large agriculturally designated parcel that provides more than sufficient area to develop a treatment plant site. However, the site consists of prime soils, which are part of a larger area of prime soils. In addition, all areas of the Tonini parcel that could accommodate a treatment plant are highly visible from
Turri Road, which is a highly scenic area. Further, the Tonini parcel is currently enrolled in the Williamson Act. Use of the site would require cancellation of the land conservation contract as described in the Environmental Impact Report.
Based on the above evaluation, there are no feasible alternative locations for the proposed treatment plant facilities as compared with the location of the facilities under the project.
The potentially significant and unavoidable adverse impacts related to the loss of agricultural land are acceptable in light of the Statement of Overriding Considerations provided herein and hereby made and adopted by the Planning Commission.

Potentially Significant Impact

The Project's facilities will result in a significant and unavoidable cumulative farmland conversion impact.

The Project will result in the direct loss of 16 acres of agricultural land.

(Why so much land? Spray fields???)

Since this
loss will contribute to the historic pattern of farmland conversion within the County
of San Luis Obispo, this will be a significant and unavoidable cumulative impact on
agricultural land.

Finding

Pursuant to CEQA Guidelines Section 15091 (a) (3), specific economic, legal, social, technological or other considerations, *including provision of employment opportunities for highly trained workers,???* make infeasible mitigation measures or
alternatives identified in the Final Environmental Impact Report.

Facts in Support of Finding

The potentially significant effect has been reduced to the maximum extent feasible
by virtue of the following mitigation measure as identified in the Final Environmental Impact Report and incorporated into the project and will substantially lessen the significant effect of the project on farmland conversion; however, the level of impact due to the conversion of agricultural land will still be considered significant and unavoidable.

Q5.11-A1 Prior to operation of the facility, the County Department of Public

Works shall provide evidence to the County Planning and Building Department that a farmland conservation easement, a farmland deed restriction, or other farmland conservation mechanism has been granted in perpetuity to the County or a qualifying entity approved by the County Agricultural Commissioner (or designee). The easement shall provide conservation acreage at a ratio of not less than 2:1 for the loss of agricultural land. The re-use of tertiary treated water would be consistent with the surrounding area because the water is treated to title 22 standards which allows the water to be placed on edible food crops, landscape areas, etc. and would not result in impacts to surrounding uses. Additionally, the project proponent shall provide appropriate funds (as determined by the County Planning Department) to compensate for reasonable administrative costs incurred by the easement holder. The area conserved shall be minimally sized at 16 acres, and shall be of a quality that is reasonably (as determined by the County Agricultural Commissioner or designee) similar to that of the farmland within the project limits.
The implementation of the above mitigation measure will reduce and substantially
lessen potential impacts from the Project on the cumulative impact on farmland. However, the Project's contribution to level of cumulative impact due to the conversion of agricultural land will still be considered significant and unavoidable.
As discussed above for the project-specific impact from the conversion of farmland, alternative locations for the treatment plant facilities are considered throughout the Final Environmental Impact Report. A screening analysis was conducted as described in Section 7 of the Draft Environmental Impact Report to identify the sites that could feasibly accomplish the fundamental goals of the project, while minimizing environmental impacts. Due to environmental constraints
and issues associated with potential alternative locations for the treatment plant,

there are no feasible alternative locations for the proposed treatment plant facilities
as compared with the location of the facilities under the Project.
The potentially significant and unavoidable adverse impact related to the loss of agricultural land is considered acceptable in light of the Statement of Overriding Considerations provided herein.

STATEMENT OF OVERRIDING CONSIDERATIONS

The California Environmental Quality Act requires the lead agency to balance the benefits of a proposed project against its unavoidable environmental risks in determining whether to approve the project. The County of San Luis Obispo proposes to approve the Los Osos Wastewater Project although unavoidable adverse impacts to agricultural resources will result, as identified in the Environmental Impact Report. Specifically, the significant and unavoidable project-specific and cumulative impacts are associated with the conversion of approximately 16 acres of agricultural land to non-agricultural uses, rendering the

land incapable of agricultural production. Consistent with past County practice, mitigation in the form of agricultural easements over similar or better agricultural land are required, however, adverse impacts are not reduced to a level considered
less than significant. Never the less, the County finds that those impacts are outweighed by the public benefits of the Los Osos Wastewater Project which include improved marine water quality, improved groundwater quality, *reducing the rate of seawater intrusion,???* and balancing the Los Osos groundwater basin.
Further, alternatives identified in the Environmental Impact Report are not considered feasible to reduce the impacts on agricultural resources below the level
of impacts that will result from the Project.
Consequently, the County finds as follows:
1. As described in the Project's Environmental Impact Report, Rough Screening Report and Fine Screening Report, the project will result in the lowest level of impacts on agricultural resources among all of the feasible alternatives. As analyzed in the above-referenced documents, all of the feasible alternatives would result in the loss of agricultural land. By locating the wastewater treatment plant facility at the Giacomazzi site, the project will reduce those impacts to the lowest feasible level, both in terms of the overall acreage of land impacted, but also in terms in the productivity of the land as measured in terms of soil classification and proximity to other productive lands.
2. As described in the Project's Environmental Impact Report, Rough Screening Report and Fine Screening Report, the project will result in the least costly feasible treatment plant site. As demonstrated in the above referenced reports, locating the treatment plant at the Mid-town site would require the construction of a membrane bioreactor or equivalent treatment

process in order to address community concerns about odors, safety, visual effects and treatment plant size. Costs of this type of treatment would exceed those available for use at the Giacomazzi site by approximately 25 million dollars. Locating the treatment plant at the Tonini site would require the purchase of approximately 645 acres of land, as opposed to 38 acres at the Giacomazzi site, which provides a cost savings of at least 6 million dollars.
3. The Los Osos Wastewater Project, which includes multiple Environmental Impact Reports prepared in 1987, 1998, 2005 and 2009; the creation of the Los Osos Community Services District in 1998; the bankruptcy of the Los Osos Community Services District in 2005; the results of community elections that occurred in the fall of 2005 in which a majority of the board members of the LOCSD were recalled in a special election and where measure B, a referendum on the location of treatment plant was passed; and the passage of AB2701 in 2006; has generated an extraordinary degree of concern and controversy among the community, the County and

the State. The level of concern and controversy has resulted in part from the various proposed locations for the wastewater treatment plant, both inside and outside of the community. Based on the exhaustive review of potential treatment plant locations examined in previous project Environmental Impact Reports put forth in 1987, 1998, and 2005, together with information presented in the Project's Environmental Impact Report, *Rough Screening Report and Fine Screening Report, and evidence presented in the current Environmental Impact Report documenting that **all** potential environmental impacts except for the loss of agricultural land can be mitigated to level of insignificance???, the Giacomazzi site is the most* feasible location for a wastewater treatment plant and as such addresses the concern and controversy surrounding the siting of the treatment plant to highest degree possible.

Further, the loss of approximately 16 acres of agricultural land is acceptable because the project will provide multiple environmental, social, and legal benefits.

As documented in the Record, the benefits of the Los Osos Wastewater Project are as follows:

1. The Project will respond to and alleviate the Regional Water Quality Control Board's waste discharge prohibition in Los Osos. In 1983, the Central Coast the Regional Water Quality Control Board determined that contamination in excess of State standards had occurred in the groundwater basin (upper aquifer) with a substantial effect from the use of septic systems throughout the community and followed with a regulatory mandate to cease and desist. In 1983 the Regional Water Quality Control Board issued Resolution No. 83-13 and made the following findings:

California Environmental Quality Act Findings – page 125

a) Previous studies (Brown and Caldwell 1983) indicated that the quality of water derived from the shallow aquifer underlying the community was deteriorating, particularly as it relates to increasing concentrations of nitrates in excess of State standards.

b) The current method of wastewater disposal by individual septic tank systems located in areas of high groundwater are a major contributing factor to this degradation of water quality.

c) Continuation of this method of waste disposal could result in health hazards to the community and the continued degradation of groundwater quality is in violation of the Porter-Cologne Act.

d) The Project will result in a community wastewater project that will comply with Regional Water Quality Control Board Waste Discharge Requirements for Los Osos, and will address the issues of water quality defined by the Waste Discharge Requirements for discharge limits issued by the Regional Water Quality Control Board.

In 2006 and 2007 the Regional Water Quality Control Board issued Cease and Desist Orders to 45 Los Osos residents with an expressed intention to eventually issue Cease and Desist Orders to all properties discharging septic system waste in the Prohibition Zone. In 2007, the Regional Water

Mitigations are vague

ADD 3-7

#4

al barrow

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To: "johnathan bishop" <jbishop@coastal.ca.gov>
Cc: "al barrow" <a.barrow@charter.net>; "Martha Goldin" <honmgret@charter.net>
Sent: Friday, March 06, 2009 2:38 PM
Attach: header.htm
Subject: 217. Monowitz -- CCC Permit Revocation Request

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OUR FILE NO:
4750-0001

March 23, 2005

Steve Monowitz

Permit Supervisor

725 Front Street,

Suite 300

Santa Cruz, CA 95060-4508

Re: Permit Revocation Request For Coastal Development Application No. A-3-SLO-03-113

Dear Mr. Monowitz:

This communication outlines the appropriate legal standards for the California Coastal Commission ("Commission") to utilize when determining whether revoke the permit ("Permit") that was issued on August 11, 2004 on Application No. A-3-SLO-03-113.

This communication does not focus on the factual allegations relating to the Permit and

the hearing, as those allegations are fully presented in the "Permit Revocation Request" prepared by the Los Osos Technical Task Force ("Revocation Request"); the February 23, 2005 rebuttal letter to Mr. Peter Douglas from Ms. Jana Zimmer ("Rebuttal Letter"); and additional comment letters that presumably are expected to have been or will be forwarded to your attention. Rather, this communication is intended to refute the legal assertions made in the Rebuttal Letter, and to provide a more accurate summary of applicable law.

When the appropriate legal standards are applied to those facts previously or subsequently submitted, it should establish that the Permit should be revoked.

I. REVOCATION IS REQUIRED IF THREE PRONGS ARE SHOWN.

CCR Title 14 Division 5.5. Article 16, 13105(a) (the "Regulation") provides:

> Grounds for revocation of a permit shall be:
>
> Intentional inclusion of inaccurate, erroneous or incomplete information in connection with a coastal development permit application, where the commission finds that accurate and complete information would have caused the commission to require additional or different conditions on a permit or deny an application. [1]

Still Relevant

Stated differently, all that the Commission must find to revoke the Permit is (1) the Commission was presented with incomplete, inaccurate or erroneous information; (2) the inclusion of this information was intentional; and (3) complete or accurate information would have caused the Commission to have issued at least one condition in a different manner, or have denied the application.

TRUE

A. The Commission Was Presented With Incomplete, Inaccurate or Erroneous Information.

The first prong to establish grounds for revocation is that the Commission was presented with incomplete, inaccurate or erroneous information. Stated differently, this first prong is met if the commission was presented with either incorrect information, or a "half-truth."

1. There Is No Requirement That The Incomplete Or Incorrect Information Be Presented By A Particular Party.

The Regulation does not require that the incorrect information be submitted by any particular party. The only way to create a requirement of disclosure by a particular party would be to add words to the Regulation. Rather, the Regulation is silent as to who must have made the representations. Adding words to a regulation is prohibited. *Burden v. Snowden* (1992) 2 Cal.4th 556, 562 *modified*, 2 Cal.4th 758 ["Where the words of the statute are clear, we may not add to or alter them to accomplish a purpose that does not appear on the face of the statute or from the legislative history"]; *Lesher Communications, Inc. v. City of Walnut Creek* (1990) 52 Cal.3d 531, 543 (1990) [A court "may not add to the statute or rewrite it to conform to an assumed intent that is not apparent in its language."]. Rather, the Regulation was drafted in the passive voice to avoid any requirement of action by a particular party.

And for good reason. Otherwise, individuals that support the issuance of the Permit other than

the applicant could make bald faced lies to the Commission and hide behind a rule that says, "unless the factual inaccuracies were presented by the actual applicant, the Commission can do nothing." This cannot be the law, nor is it the law. The Commission must have, and does have, the power to revoke permits if they were issued on incomplete or inaccurate information.

Nevertheless, the Rebuttal Letter asserts that this is the law. The rules of regulatory construction prohibit adding non-existent words and phrases. *Craig v. City of Poway* (1994) 28 Cal.App.4th 319, 337 [The Legislature is presumed to have meant what it said and the plain meaning of the language will govern the interpretation of the statute]. Contrary to this rule of regulatory construction, in an attempt to add a requirement of a particular actor, the Rebuttal Letter states the first prong requires that the "**applicant** or its representative submitted the contested testimony or information" [emphasis in Rebuttal Letter]. The only requirement is that there *were* factual misstatements; it is irrelevant who made the incorrect statements.

2. The Incomplete Or Incorrect Information Need Only Have Related To The Permit Application.

Similarly, the Rebuttal Letter asserts "the allegations merely restate a difference of opinion as to need for and the impacts of the project, not that the information provided the Commission did not accurately reflect the project to be constructed." This statement suggests that the only relevant information is that which relates to the "project to be constructed" – the size, shape, and location of the proposed structure. This may have been an inadvertent suggestion, but is nevertheless an improper conclusion, as the plain wording of the Regulation directly contradicts any such limitation. The Regulation provides that for the information to be considered, it need only have been presented "in connection with a coastal development permit application." Stated differently, if the information was relevant, it is at issue. As such, the Commission may consider any information that is relevant – including paperwork that was filed with the application, the status of approvals, the status of regulatory procedures, etc. The question of whether there are factual inaccuracies is so broad as to include whether the permits were obtained, whether the project complies with the LCP, and anything else related to the Permit.

Simply, the first prong merely requires that sometime during the Permit proceedings the Commission was presented with incomplete[2], inaccurate or erroneous information.

B. The Information Must Have Been Intentionally Included.

The second prong is that the information was intentionally included.

1. There Is No Required Showing Of Bad Faith.

The Regulation does *not* state that there is a requirement of bad faith; rather, the Regulation merely requires that the information be included "intentionally." Stated differently, there is no requirement that the Commission determine that whoever presented the information intended the *effect* of the act (i.e. intended to mislead the Commission), rather, the only requirement is that whoever presented the information had to have intended to do the act (i.e. to have intended to state or type the sentence, prepare a chart as it appeared, or have made any other representation in the manner in which it appeared as opposed to a mere oversight or any other accidental inclusion of information).

This interpretation is consistent with Black's Law Dictionary (both the 7th & 8th editions) which provides:

> "An act is intentional when foreseen and desired by the doer, and this foresight and desire resulted in the act through the operation of the will."

Simply, for an act to be "intentional" the law requires only a desire to do the act – there is no need to have a desire to have the actual effects of the act.[3] In legal jargon, the *actus reus*, is different than the *mens rea*; the act is different than the intent.

Had the Regulation been intended to require an improper motive, then the Regulations would have said so. For example, Regulation could have been drafted so as to require revocation where there was "intentional inclusion of inaccurate, erroneous or incomplete information introduced for the purpose of misleading the Commission." The Regulation, however, does not say this or anything similar. Because words cannot be added to regulations, the regulations must be interpreted as drafted. *Burden v. Snowden, supra*, 2 Cal.4th 556, 562.

Again, there is good reason for this rule. The drafters of the Regulation ("Drafters") were justifiably concerned that if the Commission required a showing of improper purpose, purpose could rarely, if ever be shown. How could the Commission ever know the motive of people who drafted documents, especially when the creator of those documents may never have even appeared at the hearing?[4] The Commission could never with any certainty determine that someone acted with a nefarious purpose. The ultimate concern of the Drafters was to preserve the California Coast. If the Commission was misled – regardless of the reason – the Commission must be allowed to properly regulate the California Coast.[5] As such, the Commission us it trapped by mere technicalities.

Yet that is exactly what the Rebuttal Letter proposes. It provides, "there is no evidence of an intent, let alone a motivation, to include erroneous or incomplete information." This statement improperly implies that the Commission must first determine whether the facts were incorrect, and *also* whether there was an improper motive. This is not the case.

2. The Best Means To Determine Whether Information Was Intentionally Included Is To Determine How Often the Statements Were Made.

The best means for the Commission to determine whether a statement was incomplete and/or factually inaccurate is to determine how many times that improper statement or a similar such statement was made. If the statement was made only one time, and that statement contradicted numerous other statements made by the same speaker, then the first statement was likely an unintended misstatement. If, however, the statement was made on more that one occasion, then the Commission can reasonably infer that the actor intended to make that statement.

Of course, there can be no hard and fast rule as to exactly when it can be known whether a particular statement is correct. In some situations one factual assertion can be known to be intentionally made. This is why the Regulation was drafted how it was – with a slight ambiguity and enough flexibility for the Commission to determine for itself whether a statement was accidental. Had the Drafters wished there to be a "bright line," they would have the exact number of misstatements that was required. The Drafters instead opted for flexibility.

At first blush, the Regulation does not appear to be clear as to exactly what is meant by "intentionally." On further examination, however, when applying general legal principles, it becomes clear that the second prong of the Regulation merely requires a showing that the presenter of the information intended to include the information in the presentation.

C. The Commission Would Have Either Issued Different Conditions Or Denied The Application.

The last prong is that the "accurate and complete information would have caused the Commission to require additional or different conditions on a permit or deny an application." In other words, the Commission must determine that the information would have affected its decision in some manner had the information been complete or accurate.

1. The Commission May Look To Later Events To Determine Whether The Commission Was Presented With Complete And Accurate Information.

The Rebuttal letter suggests that the Commission can never look to actions which took place after the hearing. This is an oversimplification. The only rule is that the Commission must determine whether the information presented at the hearing was incomplete or inaccurate at the time. This does not preclude the Commission from considering latter evidence to determine whether the information was correct or complete at the time.

The Regulation does not preclude the use of latter events to determine whether the past was correct. Again, for good reason. Otherwise, someone could lie to the Commission and the Commission could do nothing about it. If, for example, the Commission was told "tomorrow I will transfer $1 million to the City," and the transfer never occurred, but instead, three weeks thereafter, the individual transferred the money to a Swiss bank account and fled the country, the Commission should be able to determine based on that information alone that at the time that the statement was made, it was inaccurate – there was never any present intent to transfer the money. This rational conclusion is based entirely upon latter determined facts. Yet the Rebuttal Letter suggests that the Commission must ignore this information and conclude that the information it initially received was accurate. Because this legal interpretation of a regulation leads to absurd conclusions, the legal interpretation must be discarded. *Landrum v. Superior Court* (1981) 30 Cal.3d 1, 9 [courts are reluctant to attribute to the drafters of legislation an intent to create "an illogical or confusing scheme"].

Simply, the Commission *must* be permitted to look to future events; otherwise it could not fully determine the truth of the past events. When doing so, the Commission must determine whether it would have ruled differently. If the Commission would have issued, added, removed or changed any conditions, or if it would have denied the Permit, the Commission must revoke the Permit.

II. ADDITIONAL CORRECTIONS

In addition to those comments mentioned above, there are two additional comments made in the Rebuttal Letter that should be corrected.

A. The Existence of a Court Case In No Way Removes The Commission's Duty to Respond.

First, the Rebuttal Letter argues that because there is an existent lawsuit in which it is alleged that the Commission violated the Coastal Act, that somehow the Commission is therefore absolved from determining the issue in the current instance. This is incorrect. The fact that a court of law will determine a somewhat related issue on a previous matter does not absolve the Commission from its statutory and regulatory duty to now determine whether the Permit should be revoked. This is particularly true because the Court must use different legal standards, and will analyze different issues than those discussed herein. In fact, if the Commission fails to rule as required, it would likely be subject to litigation wherein it would be alleged that the Commission's failure of analysis was contrary

to law.

B. Neither Party Has The Burden of Proof.

Second, the Rebuttal Letter asserts that "Complainants have the burden to prove several separate elements." This can clearly be shown to not be the state of the law for various reasons. First, the Rebuttal Letter provides no authority that any party has the burden of proof. Second, 14 CCR 13108(d) provides only that Commission may revoke the permit if the Commission finds "that any of the grounds specified in [the Regulation] exist." 14 CCR 13108(d) does not require that either party meet some unspecified burden of proof. Third, the plain wording of the Regulation, too, does not provide that either party has the burden of proof. Last, pursuant to 14 CCR 13104, the Commission's Executive Director has standing to initiate proceedings. If the assertion was correct that the Complainants have the burden of proof, then 14 CCR 13104, or another similar regulation would state how the burden of proof is different in this situation where neither party requested revocation of the permit.

Simply, there is no authority for such a proposition. If indeed, there was some such requirement there would be at least a *scintilla* of evidence to support this proposition. Presumably, the authors of the Rebuttal Letter assumed that the *court* rules of burdens of proof applied in this *administrative* proceeding; but again, no authority is presented for such conclusion.

III. CONCLUSION

If the Commission finds that (1) the Commission was presented with incomplete, erroneous, or incorrect information; (2) the party intended to present this information to the Commission; and (3) the inclusion of proper information would have caused the Commission to have issued a different decision, then the Commission must revoke the Permit.

Very truly yours,

Scott E. Porter

for BURKE, WILLIAMS & SORENSEN, LLP

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[1] Section 13105(b) provides the alternate ground for revocation of a permit: "Failure to comply with the notice provisions of Section 13054, where the views of the person(s) not notified were not otherwise made known to the commission and could have caused the commission to require additional or different conditions on a permit or deny an application."

[2] The MacMillan 1980 Legal Thesaurus lists twenty three synonyms to the word to the word "incomplete." The terms are "broken, defective, deficient, devoid, imperfect, inadequate, inchoate, insufficient, non-substantial (not sufficient), outstanding (unresolved), paltry, partial (part), partial (relating to apart), perfunctory, rudimentary, scarce."

[3] Numerous other authorities support this distinction. For example, Webster's Ninth New Collegiate Dictionary defines intent as "the state of mind with which an act is done: volition." It further provides that a synonym for "intent" is

"voluntary." Another example is from the criminal context. There an act is intentional, so long as it was not accidental; there is no duty to show any further intent, unless the statutes specifically so provides. *U.S. v. Fuller* 162 f.3d 256 (4th Cir. 1998). This is confirmed by the legal maxim *In criminalibus, voluntas reputabitur pro facto* (in criminal cases, the intent will be taken for the deed."

[4] This is not to suggest that those presenting incomplete information to the Commission did not have a motive for doing so. Numerous motives may exist, including: (1) the desire to avoid any potential fines to be imposed by water quality officials; (2) the desire to quickly complete the project before a replacement board of directors opts to terminate the project; (3) the desire to comply with one's boss who bases job performance based upon whether the project is approved. Rather, this is simply intended to state that there is no need to show any such motivation.

[5] Of course, there must be some finality to Commission decisions. That is why the three prongs were required.

#5

Section 30006.5 Legislative findings and declarations; technical advice and recommendations

The Legislature further finds and declares that sound and timely scientific recommendations are necessary for many coastal planning, conservation, and development decisions and that the commission should, in addition to developing its own expertise in significant applicable fields of science, interact with members of the scientific and academic communities in the social, physical, and natural sciences so that the commission may receive technical advice and recommendations with regard to its decision making, especially with regard to issues such as coastal erosion and geology, marine biodiversity, wetland restoration, the question of sea level rise, desalination plants, and the cumulative impact of coastal zone developments.
(Added by Ch. 965, Stats.

Section 30007 Housing; local government

Nothing in this division shall exempt local governments from meeting the requirements of state and federal law with respect to providing low- and moderate-income housing, replacement housing, relocation benefits, or any other obligation related to housing imposed by existing law or any law hereafter enacted.

Section 30007.5 Legislative findings and declarations; resolution of policy conflicts

The Legislature further finds and recognizes that conflicts may occur between one or more policies of the division. The Legislature therefore declares that in carrying out the provisions of this division such conflicts be resolved in a manner which on balance is the most protective of significant coastal resources. In this context, the Legislature declares that broader policies which, for example, serve to concentrate development in close proximity to urban and employment centers may be more protective, overall, than specific wildlife habitat and other similar resource policies.

PROJECT WILL DRAIN WETLANDS

Section 30121 Wetland

"Wetland" means lands within the coastal zone which may be covered periodically or permanently with shallow water and include saltwater marshes, freshwater marshes, open or closed brackish water marshes, swamps, mudflats, and fens.

Section 30004 Legislative findings and declarations; necessity of continued planning and management

The Legislature further finds and declares that:
(a) To achieve maximum responsiveness to local conditions, accountability, and public accessibility, it is necessary to rely heavily on local government and local land use planning procedures and enforcement.
(b) To ensure conformity with the provisions of this division, and to provide maximum state involvement in federal activities allowable under federal law or regulations or the United States Constitution which affect California's coastal resources, to protect regional, state, and national interests in assuring the maintenance of the long-term productivity and economic vitality of coastal resources necessary for the well-being of the people of the state, and to avoid long-term costs to the public and a diminished quality of life resulting from the misuse of coastal resources, to coordinate and integrate the activities of the many agencies whose activities impact the coastal zone, and to supplement their activities in matters not properly within the jurisdiction of any existing agency, it is necessary to provide for continued state coastal planning and management through a state coastal commission.

Section 30006.5 Legislative findings and declarations; technical advice and recommendations

The Legislature further finds and declares that sound and timely scientific recommendations are necessary for many coastal planning, conservation, and development decisions and that the commission should, in addition to developing its own expertise in significant applicable fields of science, interact with members of the scientific and academic communities in the social, physical, and natural sciences so that the commission may receive technical advice and recommendations with regard to its decisionmaking, especially with regard to issues such as coastal erosion and geology, marine biodiversity, wetland restoration, the question of sea level rise, desalination plants, and the cumulative impact of coastal zone developments.
(Added by Ch. 965, Stats. 1992.)

Section 30007 Housing; local government
Nothing in this division shall exempt local governments from meeting the requirements of state and federal law with respect to providing low- and moderate-income housing, replacement housing, relocation benefits, or any other obligation related to housing imposed by existing law or any law hereafter enacted.

170 P Findings

Section 30105.5 Cumulatively; cumulative effect
"Cumulatively" or "cumulative effect" means the incremental effects of an individual project shall be reviewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.
(Added by Ch. 1087, Stats. 1980.)

Section 30106 Development
9
"Development" means, on land, in or under water, the placement or erection of any solid material or structure; discharge or disposal of any dredged material or of any gaseous, liquid, solid, or thermal waste; grading, removing, dredging, mining, or extraction of any materials; change in the density or intensity of use of land, including, but not limited to, subdivision pursuant to the Subdivision Map Act (commencing with Section 66410 of the Government Code), and any other division of land, including lot splits, except where the land division is brought about in connection with the purchase of such land by a public agency for public recreational use; change in the intensity of use of water, or of access thereto; construction, reconstruction, demolition, or alteration of the size of any structure, including any facility of any private, public, or municipal utility; and the removal or harvesting of major vegetation other than for agricultural purposes, kelp harvesting, and timber operations which are in accordance with a timber harvesting plan submitted pursuant to the provisions of the Z'berg-Nejedly Forest Practice Act of 1973 (commencing with Section 4511).

Section 30107.5 Environmentally sensitive area
"Environmentally sensitive area" means any area in which plant or animal life or their habitats are either rare or especially valuable because of their special nature or role in an ecosystem and which could be easily disturbed or degraded by human activities and developments.

Section 30108 Feasible
"Feasible" means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors

Section 30108.2 Fill
"Fill" means earth or any other substance or material, including pilings placed for the purposes of erecting structures thereon, placed in a submerged area.

Bringing Pollutants Back!? Recharge

Section 30231 Biological productivity; water quality

The biological productivity and the quality of coastal waters, streams, wetlands, estuaries, and lakes appropriate to maintain optimum populations of marine organisms and for the protection of human health shall be maintained and, where feasible, restored through, among other means, minimizing adverse effects of waste water discharges and entrainment, controlling runoff, preventing depletion of ground water supplies and substantial interference with surface waterflow, encouraging waste water reclamation, maintaining natural vegetation buffer areas that protect riparian habitats, and minimizing alteration of natural stream

Section 30236 Water supply and flood control

Section 30240 Environmentally sensitive habitat areas; adjacent developments

(a) Environmentally sensitive habitat areas shall be protected against any significant disruption of habitat values, and only uses dependent on those resources shall be allowed within those areas.

(b) Development in areas adjacent to environmentally sensitive habitat areas and parks and recreation areas shall be sited and designed to prevent impacts which would significantly degrade those areas, and shall be compatible with the continuance of those habitat and recreation areas.

(Amended by Ch. 285, Stats. 1991.)

Section 30241 Prime agricultural land; maintenance in agricultural production

The maximum amount of prime agricultural land shall be maintained in agricultural production to assure the protection of the areas' agricultural economy, and conflicts shall be minimized between agricultural and urban land uses through all of the following:

(a) By establishing stable boundaries separating urban and rural areas, including, where necessary, clearly defined buffer areas to minimize conflicts between agricultural and urban land uses.

(b) By limiting conversions of agricultural lands around the periphery of urban areas to the lands where the viability of existing agricultural use is already severely limited by conflicts with urban uses or where the conversion of the lands would complete a logical and viable neighborhood and contribute to the establishment of a stable limit to urban development.

(c) By permitting the conversion of agricultural land surrounded by urban uses where the conversion of the land would be consistent with Section 30250.

(d) By developing available lands not suited for agriculture prior to the conversion of agricultural lands.

(e) By assuring that public service and facility expansions and nonagricultural development do not impair agricultural viability, either through increased assessment costs or degraded air and water quality.

(f) By assuring that all divisions of prime agricultural lands, except those conversions approved pursuant to subdivision (b), and all development adjacent to prime agricultural lands shall not diminish the productivity of such prime agricultural lands.

(Amended by: Ch. 1066, Stats. 1981; Ch. 43, Stats. 1982.)

Channelizations, dams, or other substantial alterations of rivers and streams shall incorporate the best mitigation measures feasible, and be limited to (l) necessary water supply projects, (2) flood control projects where no other method for protecting existing structures in the flood plain is feasible and where such protection is necessary for public safety or to protect existing development, or (3) developments where the primary function is the improvement of fish and wildlife habitat.

Section 30237 (Repealed by Ch. 286, Stats. 2004.)

Section 30244 Archaeological or paleontological resources

Where development would adversely impact archaeological or paleontological resources as identified by the State Historic Preservation Officer, reasonable mitigation measures shall be required.

37

Re submission

23.01.032 - 033

b. Proposals pending at time of LCP certification:

(1) Any development proposal which the county approved before certification of the Local Coastal
Program but which has not been submitted to the Coastal Commission for approval shall be re-submitted to the county through an
application for a permit pursuant to this title. The decision on the application shall be based solely
on the requirements of this title.

(2) Any development proposal which the county approved before certification of the Local Coastal
Program and for which an application has been filed with the Coastal Commission may, at the option *of the applicant, remain with the Commission for completion of review and permit issuance.* ***Commission review of any such application shall be based on the provisions of the certified Local Coastal Program.*** Alternatively, the applicant may re-submit the proposal to the
county through an application for a permit pursuant to this title, and the decision on the application shall be based solely on the provisions of this title. Projects which elect to obtain a coastal permit from the Coastal Commission will remain under the jurisdiction of the Commission
as set forth in subsection a. above.

Section 30251 Scenic and visual qualities

The scenic and visual qualities of coastal areas shall be considered and protected as a resource of public importance. Permitted development shall be sited and designed to protect views to and along the ocean and scenic coastal areas, to minimize the alteration of natural land forms, to be visually compatible with the character of surrounding areas, and, where feasible, to restore and enhance visual quality in visually degraded areas. New development in highly scenic areas such as those designated in the California Coastline Preservation and Recreation Plan prepared by the Department of Parks and Recreation and by local government shall be subordinate to the character of its setting

Section 30253 Minimization of adverse impacts

New development shall do all of the following:

(a) Minimize risks to life and property in areas of high geologic, flood, and fire hazard.

(b) Assure stability and structural integrity, and neither create nor contribute significantly to erosion, geologic instability, or destruction of the site or surrounding area or in any way require the construction of protective devices that would substantially alter natural landforms along bluffs and cliffs.
(c) Be consistent with requirements imposed by an air pollution control district or the State Air Resources Board as to each particular development.
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LOS OSOS IS MAPPED LIQUEFACTION ZONE THROUGHOUT SEALED STEP IS MORE PROTECTIVE

(d) Minimize energy consumption and vehicle miles traveled. Less cost... Less miles
(e) Where appropriate, protect special communities and neighborhoods that, because of their unique characteristics, are popular visitor destination points for recreational uses.
(Amended by Ch. 179, Stats. 2008)

Section 30321 Jurisdiction of commission
For purposes of this article, "a matter within the commission's jurisdiction" means any permit action, federal consistency review, appeal, local coastal program, port master plan, public works plan, long-range development plan, categorical or other exclusions from coastal development permit requirements, or any other quasi-judicial matter requiring commission action, for which an application has been submitted to the commission.
(Added by Ch. 1114, Stats. 1992.)-

(b) In addition to any other applicable penalty, including a civil fine imposed pursuant to Section 30824, a commission member who knowingly violates this section shall be subject to a civil fine, not to exceed seven thousand five hundred dollars ($7,500). Notwithstanding any law to the contrary , the court may award attorney's fees and costs to the prevailing party.
(Added by Ch. 1114, Stats. 1992; Amended by Ch. 798, Stats. 1993.)
Section 30327.5

Section 30328 Violations; remedies
If a violation of this article occurs and a commission decision may have been affected by the violation, an aggrieved person, as described in Section 30801, may seek a writ of mandate from a court requiring the commission to revoke its action and rehear the matter.
(Added by Ch. 1114, Stats, 1992.)

The commission, unless specifically otherwise provided, shall have the primary responsibility for the implementation of the provisions of this division and is designated as the state coastal zone planning and management agency for any and all purposes, and may exercise any and all powers set forth in the Federal Coastal Zone Management Act of 1972 (16 U.S.C. 1451, et seq.) or any amendment thereto or any other federal act heretofore or hereafter enacted that relates to the planning or management of the coastal zone.

Section 30336 Planning and regulatory assistance to local governments
The commission shall, to the maximum extent feasible, assist local governments in exercising the planning and regulatory powers and responsibilities provided for by this division where the local government elects to exercise those powers and responsibilities and requests assistance from the commission, and shall cooperate with and assist other public agencies in carrying out this division. Similarly, every public agency, including regional and state agencies and local governments, shall cooperate with the commission and shall, to the extent their resources permit, provide any advice, assistance, or information the commission may require to perform its duties and to more effectively exercise its authority.
(Amended by Ch. 285, Stats. 1991.)

Sections 30342 and 30343 (Repealed by Ch. 294, Stats. 2006.)
Section 30344 Guide to coastal resources; components; purpose; production; distribution
(a) The Legislature hereby finds and declares that the coastal zone is one of its most precious natural resources, rich in diversity of living and nonliving resources and in the wide range of opportunities it provides for the use and conservation by the people of this state and nation. The Legislature further finds that, in order to promote the wise use of coastal resources for, among

other things, recreation, habitat conservation, educational, and scientific study, the production of food and fiber, residential purposes, and economic growth, it is necessary to provide the public with an informative and educational guide to coastal resources.
(b) The commission shall, not later than July 1, 1984, prepare a guide to coastal resources. The guide shall include, but not be limited to, the following components:
(l) An inventory of the natural resources which are of environmental, social, economic, and educational importance to the public. The inventory shall include a description of the resources, their location, and their significance to the people and the natural environment.
(2) An inventory of manmade resources of cultural, historic, economic, and educational importance to the public. The inventory shall focus on those resources which, by virtue of their location in or near the coastal zone, take on a special character or which, because of their nature, require a coastal location. The

inventory shall include a description of the resource and any historic, educational, and technical notes of interest.
(3) A listing of public and private entities having responsibility for the planning, management, use, and restoration of the coastal resources and how interested persons can contact those entities for further information about their projects and programs.
The purpose of this guide shall be to contribute to a better understanding by the public of the importance of coastal resources, both to the quality of life for people and to the maintenance of a healthy and productive natural environment. The guide shall be sensitive to the need for a balanced approach to the conservation and use of coastal resources, to the rights and responsibilities of individuals and the public in the protection and use of these resources, and the need to limit human use of some resources in order to avoid their degradation or destruction. The guide shall not be a policy guide, but rather it shall be an educational tool to increase the public understanding and appreciation of the value of California's coastal resources.
(c) The commission shall utilize innovative techniques for the preparation, production, and distribution of the guide so as to minimize costs to the public. To this end, the commission is encouraged to enlist the voluntary assistance of private and public organizations with appropriate expertise. In addition, the commission shall seek grants from private and public institutions to augment its limited funding.
Notwithstanding Section 14850 of the Government Code or any other provision of law, the commission may contract for the production of this guide with any public or private entity in order to meet the objective of this section.
(d) The guide shall be written and illustrated so as to be easily understood by the general public and shall be set forth in a format that ensures its usefulness.
(e) The guide shall be made available to the public at a reasonable cost.
(Added by Ch. 1470, Stats. 1982.)
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Section 30401 Effect on existing state agencies; construction of chapter
Except as otherwise specifically provided in this division, enactment of this division does not increase, decrease, duplicate or supersede the authority of any existing state agency.
This chapter shall not be construed to limit in any way the regulatory controls over development pursuant to Chapters 7 (commencing with Section 30600) and 8 (commencing with Section 30700), except that the commission shall not set standards or adopt regulations that duplicate regulatory controls established by any existing state agency pursuant to specific statutory requirements or authorization.
(Amended by Ch. 285, Stats. 1991.)

Section 30412 State Water Resources Control Board & Regional Water Quality Control Boards
(a) In addition to Section 13142.5 of the Water Code, this section shall apply to the commission and the State Water Resources Control Board and the California regional water quality control boards.
(b) The State Water Resources Control Board and the California regional water quality control boards are the state agencies with primary responsibility for the coordination and control of water quality. The State Water Resources Control Board has primary responsibility for the administration of water rights pursuant to applicable law. The commission shall assure that proposed development and local coastal programs shall not frustrate this section. The commission shall not, except as provided in subdivision (c), modify, adopt conditions, or take any action in conflict with any determination by the State Water Resources Control Board or any California regional water quality control board in matters relating to water quality or the administration of water rights.

Except as provided in this section, nothing herein shall be interpreted in any way either as prohibiting or limiting the commission, local government, or port governing body from exercising the regulatory controls over development pursuant to this division in a manner necessary to carry out this division.

(c) Any development within the coastal zone or outside the coastal zone which provides service to any area within the coastal zone that constitutes a treatment work shall be reviewed by the commission and any permit it issues, if any, shall be determinative only with respect to the following aspects of the development:

(1) The siting and visual appearance of treatment works within the coastal zone.

(2) The geographic limits of service areas within the coastal zone which are to be served by particular treatment works and the timing of the use of capacity of treatment works for those service areas to allow for phasing of development and use of facilities consistent with this division.

(3) Development projections which determine the sizing of treatment works for providing service within the coastal zone.

The commission shall make these determinations in accordance with the policies of this division and shall make its final determination on a permit application for a treatment work prior to the final approval by the State Water Resources Control Board for the funding of such treatment works. Except as specifically provided in this subdivision, the decisions of the State Water Resources Control Board relative to the construction of treatment works shall be final and binding upon the commission.

(d) The commission shall provide or require reservations of sites for the construction of treatment works and points of discharge within the coastal zone adequate for the protection of coastal resources consistent with the provisions of this division.

(e) Nothing in this section shall require the State Water Resources Control Board to fund or certify for funding, any specific treatment works within the coastal zone or to prohibit the State Water Resources Control Board or any California regional water quality control board from requiring a higher degree of treatment at any existing treatment works.

(Amended by Ch. 285, Stats. 1991.)

Section 30413 State Energy Resources Conservation & Development Commission
(a) In addition to the provisions set forth in subdivision (f) of Section 30241, and in Sections 25302, 25500, 25507, 25508, 25510, 25514, 25516.1, 25523, and 25526, the provisions of this section shall apply to the commission and the State Energy Resources Conservation and Development Commission with respect to matters within the statutory responsibility of the latter.
(b) The commission shall, prior to January 1, 1978, and after one or more public hearings, designate those specific locations within the coastal zone where the location of a facility as defined in Section 25110 would prevent the achievement of the objectives of this division; provided, however, that specific locations that are presently used for such facilities and reasonable expansion thereof shall not be so designated. Each such designation shall include a description of the boundaries of those locations, the objectives of this division which would be so affected, and detailed findings concerning the significant adverse impacts that would result from development of a facility in the designated area. The commission shall consider the conclusions, if any, reached by the State Energy Resources Conservation and Development Commission in its most recently promulgated comprehensive report issued pursuant to Section 25309. The commission shall transmit a copy of its report prepared pursuant to this subdivision to the State Energy Resources Conservation and Development Commission.
(c) The commission, after it completes its initial designations in 1978, shall, prior to January 1, 1980, and once every two years thereafter until January 1, 1990, revise and update the designations specified in subdivision (b). After January 1, 1990, the commission shall revise and update those designations not less than once every five years. Those revisions shall be effective on January 1, 1980, or on January 1 of the year following adoption of the revisions. The provisions of subdivision (b) shall not apply to any sites and related facilities specified in any notice of intention to file an application for certification filed with the State Energy Resources Conservation and Development Commission pursuant to Section 25502 prior to designation of additional locations made by the commission pursuant to this subdivision.
(d) Whenever the State Energy Resources Conservation and Development Commission exercises its siting authority and undertakes proceedings pursuant to the provisions of Chapter 6 (commencing with Section 25500) of Division 15 with respect to any thermal powerplant or transmission line to be located, in whole or in part, within the coastal zone, the commission shall participate in those proceedings and shall receive from the State Energy Resources Conservation and Development Commission any notice of intention to file an application for certification of a site and related facilities within the coastal zone. The commission shall analyze each notice of intention and shall, prior to completion of the preliminary report required by Section 25510, forward to the State Energy Resources Conservation and Development Commission a written report on the suitability of the proposed site and related facilities specified in that notice . The commission's report shall contain a consideration of, and findings regarding, all of the following:
(1) The compatibility of the proposed site and related facilities with the goal of protecting coastal resources.
(2) The degree to which the proposed site and related facilities would conflict with other existing or planned coastal-dependent land uses at or near the site.
(3) The potential adverse effects that the proposed site and related facilities would have on aesthetic values.
(4) The potential adverse environmental effects on fish and wildlife and their habitats.

(5) The conformance of the proposed site and related facilities with certified local coastal programs in those jurisdictions which would be affected by any such development.
(6) The degree to which the proposed site and related facilities could reasonably be modified so as to mitigate potential adverse effects on coastal resources, minimize conflict with existing or planned coastal-dependent uses at or near the site, and promote the policies of this division.
(7) Such other matters as the commission deems appropriate and necessary to carry out this division.
(e) The commission may, at its discretion, participate fully in other proceedings conducted by the State Energy Resources Conservation and Development Commission pursuant to its powerplant siting authority. In the event the commission participates in any public hearings held by the State Energy Resources Conservation and Development Commission, it shall be afforded full opportunity to present evidence and examine and cross-examine witnesses.
(f) The State Energy Resources Conservation and Development Commission shall forward a copy of all reports it distributes pursuant to Sections 25302 and 25306 to the commission and the commission shall, with respect to any report that relates to the coastal zone or coastal zone resources, comment on those reports, and shall in its comments include a discussion of the desirability of particular areas within the coastal zone as designated in such reports for potential powerplant development. The commission may propose alternate areas for powerplant development within the coastal zone and shall provide detailed findings to support the suggested alternatives.
(Amended by: Ch. 1013 and Ch. 1075, Stats. 1978; Ch. 1031, Stats. 1991.)

Section 30414 State Air Resources Board & local air pollution control districts

(a) The State Air Resources Board and air pollution control districts established pursuant to state law and consistent with requirements of federal law are the principal public agencies responsible for the establishment of ambient air quality and emission standards and air pollution control programs. The provisions of this division do not authorize the commission or any local government to establish any ambient air quality standard or emission standard, air pollution control program or facility, or to modify any ambient air quality standard, emission standard, or air pollution control program or facility which has been established by the state board or by an air pollution control district.
(b) Any provision of any certified local coastal program which establishes or modifies any ambient air quality standard, any emission standard, any air pollution control program or facility shall be inoperative.
(c) The State Air Resources Board and any air pollution control district may recommend ways in which actions of the commission or any local government can complement or assist in the implementation of established air quality programs.
(Amended by Ch. 1246, Stats. 1982.)

c. Notice of Final County Action on appeals within the Coastal Zone. Where an appeal has been filed
and decided pursuant to this section on a project that is appealable to the Coastal Commission as set forth
in Section 23.01.043, the county shall provide Notice of Final Action on the project as set forth in Section
23.02.036.

d. Effective date of appeal decision. Except where otherwise provided by Section 23.02.039 for projects
that may be appealed to the Coastal Commission, a decision by the Board of Supervisors on an appeal shall

be effective as of the date the decision is reached, and a decision on an appeal by the Planning Commission
shall be effective on the 15th day following

23.01.043 - Appeals to the Coastal Commission.
Decisions by the Planning Department, Planning Commission or Board of Supervisors on developments within
the Coastal Zone may be appealed to the California Coastal Commission as set forth in this section.

a. Status of appellant:

(1) Who may appeal. An appeal may be filed by an applicant, any aggrieved person, or two members
of the Coastal Commission pursuant to California Public Resources Code (PRC) Section 30625.

(2) Aggrieved person defined: As set forth in Public Resources Code Section 30801, an aggrieved
person is: anyone who, either in person or through a representative who was explicitly identified as such, appeared at a public hearing before the Planning Director, Planning Commission or Board
of Supervisors in connection with the decision or appeal of any development, or who by other appropriate means prior to a hearing, informed the county of the nature of his or her concerns, unless for good cause was unable to do either. Aggrieved person also includes the applicant for a permit.

We Are Exhausting

b. Exhaustion of local appeals required. For an action on coastal development permit applications that
may be appealed to the Coastal Commission as set forth in subsection c of this section, an applicant or
aggrieved party may appeal a county action on a coastal development application to the Coastal Commission only after all possible local appeals pursuant to Section 23.01.042 have been exhausted. This
limitation shall not apply to any circumstance identified in Section 13573 of Title 14 of the California Code
of Regulations, including:

(1) A situation where an appellant was denied the right of appeal pursuant to Section 23.01.042 because county notice and hearing procedures for the action on the development did not comply with the provisions of Title 14, Division 5.5, Chapter 8, Subchapter 2 of the California Code pf Regulations; or

(2) An appeal of a county decision by two members of the Coastal Commission pursuant to Public
Resources Code Section 30625. Provided, however, that notice of Commissioners appeals shall be transmitted to the Board of Supervisors pursuant to Title 14 of the California Code of Regulations Section 13573(b) and the appeal to the Commission may be suspended pending a decision on the merits of the appeal by the Board of Supervisors. If the 23.01.043 decision of the Board modifies or reverses the previous decision, the Commissioners shall be required to file a new appeal from that decision.

(3) Where the County charges a fee for the filing or processing of appeals of actions on coastal

development projects.

c. Appealable development. As set forth in Public Resources Code Section 30603(a), and this title, an
action by the County on a permit application, including any Variance, Exception or Adjustment granted,
for any of the following projects may be appealed to the California Coastal Commission:

(1) Developments approved between the sea and the first public road paralleling the sea, or within 300
feet of the inland extent of any beach or of the mean high tide line of the sea where there is no beach.

(2) Approved developments not included in subsection c(1) of this section that are proposed to be
located on tidelands, submerged lands, public trust lands, within 100 feet of any wetland, estuary, stream, or within 300 feet of the top of the seaward face of any coastal bluff.

(3) Developments approved in areas not included in subsections c(1) or c(2) that are located in a Sensitive Coastal Resource Area, which includes:

(i) Special marine and land habitat areas, wetlands, lagoons, and estuaries mapped and designated as Environmentally Sensitive Habitats (ESHA) in the Local Coastal Plan. Does not include resource areas determined by the County to be Unmapped ESHA.

(ii) Areas possessing significant recreational value, including any "V" (Visitor Serving designation) as shown in the Land Use Element and areas in or within 100 feet of any park or recreation area.

(iii) Highly scenic areas which are identified as Sensitive Resource Areas by the Land Use Element.

(iv) Archaeological sites referenced in the California Coastline and Recreation Plan or as designated by the State Historic Preservation Officer.

(v) Special Communities or Small-Scale Neighborhoods which are significant visitor destination areas as defined by Chapter 23.11 of this title.

(vi) Areas that provide existing coastal housing or recreational opportunities for low-and moderate income persons.

(vii) Areas where divisions of land could substantially impair or restrict coastal access.

The procedures established by Section 23.01.041c (Rules of Interpretation) shall be used to resolve any
questions regarding the location of any land use category or combining designation boundary, or the
location of a proposed public facility, road alignment or other symbol or line on the official maps, including
for the purpose of determining the appealability of a development within a sensitive Resource Area.

(4) Any approved development not listed in Coastal Table O, Part I of the Land Use Element as a
Principal Permitted (P) Use.

(5) Any development that constitutes a Major Public Works Project or Major Energy Facility. "Major
Public Works Project" or "Major Energy Facility" shall mean any proposed public works project or energy facility exceeding $100,000 in estimated construction cost, pursuant to Section 13012,

Title 14 of the California Administrative Code.
[Amended 2004, Ord. 3048]

d. Grounds for appeal. As required by Section 30603 of the Public Resources Code, the grounds for appeal pursuant to this section shall be limited to an allegation that the development does not conform to the standards set forth in the certified Local Coastal Program or the public access policies set forth in the California Coastal Act (Section 30210 et seq. of the Public Resources Code).

The grounds for appeal of a denial of a permit pursuant to section c(5) (Major Public Works or Major Energy Facility) shall be limited to an allegation that the development conforms to the standards set forth in the certified Local Coastal Program and the public access policies set forth in the California Coastal Act (Section 30210 et seq. of the Public Resources Code).

23.01.043 - 045

e. Time for appeal to Coastal Commission. Any final action by the county on an appealable development shall become effective after the 10-working day appeal period to the Commission in accordance with the requirements of Section 23.02.039 and applicable provisions of the Coastal Act.

f. Notice to county of appeal to Coastal Commission. An appellant shall notify the county when appealing to the Coastal Commission by providing the county a copy of the information required in Section 13111 of Title 14 of the California Code of Regulations.
[Amended 2004, Ord. 2999; Amended 2004, Ord. 3001, Amendment 2006, Ord. 3082]

23.01.044 - Adjustment:

a. When allowed: When a standard of Chapter 23.04, 23.05 or 23.08, or a planning area standard of the Land Use Element identifies specific circumstances under which reduction of the standard is appropriate, an applicant may request an adjustment to the standard. (For example, Section 23.04.108a(3) provides that a required front setback may be reduced to a minimum of five feet through the adjustment process when the elevation of the lot is seven feet above or below the street centerline at 50 feet from the centerline.)

b. Application filing and processing: An adjustment request is to be filed with the Planning Department in the form of an attachment to the project application, with appropriate supporting materials. The request is to specify the Coastal Zone Land Use Ordinance standard requested for adjustment, and document the

manner in which the proposed project qualifies for the adjustment. A request for adjustment shall not be
accepted for processing by the Planning Department unless the request is within the range of adjustments
prescribed in the standard. A request for adjustment shall be approved by the Planning Director when the
director finds that the criteria for adjustment specified in the subject standard are satisfied.

Policy 12: Geologic Hazards Mapping
As part of the periodic update of an area plan, the draft plan shall include development of a dynamic Geologic
Hazards Map consistent with the Safety Element and updated geologic information. [THIS POLICY SHALL BE
IMPLEMENTED AS A PROGRAM.]
[Added 2004, Ord. 3006]

POLICIES FOR ARCHAEOLOGICAL RESOURCES

Because archaeological resources are scarce and non-renewable resources, the following general policies represent
the county's commitment to ensure that any proposed development would be designed and located to minimize
its impacts on archaeological resources:

SDBR is more protective HDD Directional Drill - NOT Deep Trenching

Policy 1: Protection of Archaeological Resources
The county shall provide for the protection of both known and potential archaeological resources. All available
measures, including purchase, tax relief, purchase of development rights, etc., shall be explored at the time of a
development proposal to avoid development on important archaeological sites. Where these measures are not
feasible and development will adversely affect identified archaeological or paleontological resources, adequate
mitigation shall be required. [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD.]

Policy 3: Identification of Archaeological Sites
The county shall establish and maintain archaeological site records of data files about known sites. These sensitive
areas shall be defined as follows:
- Within rural areas, the county maintains on file a parcel number list of known sites as prepared and updated
by the California Archaeological Site Survey Office.
- Within urban areas, the county shall maintain maps in the Land Use Element (combining designation)
which reflect generalized areas of known sites. These maps shall be prepared by the California Archaeological Site Survey Regional Office.
Specific archaeological site information shall be treated as confidential to protect the archaeological resources.

Development within an archaeological sensitive areas shall not occur until a preliminary site survey is conducted
for the site, and if necessary, mitigation measures implemented. [THIS POLICY SHALL BE IMPLEMENTED
PURSUANT TO SECTION 23.07.106 OF THE COASTAL ZONE LAND USE ORDINANCE.]
Early information on sensitive sites where new development is anticipated can be used to design and locate
structures and site alterations to eliminate impacts. A preliminary archaeological survey can also help facilitate the
timing of construction: if there is no evidence of the potential existence of archaeological resources, construction
can commence; if the preliminary survey does indicate the presence of archaeological resources, mitigation
measures can be designed into the development.
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12-2 COASTAL PLAN POLICIES
SUMMARY
Early identification can save both time and money for the applicant. Concerns have been raised by previous
applicants about the expense and time-consuming delay if a project is stopped. Work crews, equipment and capital
remain suspended until mitigation measures are drafted. Although all construction must cease if a site is discovered
during any phase of construction, a preliminary survey can usually determine the potential extent of resources and
thus avert unnecessary delays through an appropriate mitigation plan.

Policy 4: Preliminary Site Survey for Development within Archaeologically Sensitive Areas
Development shall require a preliminary site survey by a qualified archaeologist knowledgeable in Chumash culture
prior to a determination of the potential environmental impacts of the project. [THIS POLICY SHALL BE
IMPLEMENTED PURSUANT TO SECTION 23.07.106 OF THE CZLUO.]

Policy 5: Mitigation Techniques for Preliminary Site Survey before Construction
Where substantial archaeological resources are found as a result of a preliminary site survey before construction,
the county shall require a mitigation plan to protect the site. Some examples of specific mitigation techniques
include:
a. Project redesign could reduce adverse impacts of the project through relocation of open space, landscaping
or parking facilities.
b. Preservation of an archaeological site can sometimes be accomplished by covering the site with a layer of
fill sufficiently thick to insulate it from impact. This surface can then be used for building that does not

require extensive foundations or removal of all topsoil.
c. When a project impact cannot be avoided, it may be necessary to conduct a salvage operation. This is
usually a last resort alternative because excavation, even under the best conditions, is limited by time, costs
and technology. Where the chosen mitigation measure necessitates removal of archaeological resources,
the county shall require the evaluation and proper deposition of the findings based on consultation with
a qualified archaeologist knowledgeable in the Chumash culture.
d. A qualified archaeologist knowledgeable in the Chumash culture may need to be on-site during initial
grading and utility trenching for projects within sensitive areas.
[THIS POLICY SHALL BE IMPLEMENTED PURSUANT TO SECTION 23.07.106 OF THE CZLUO.]

Policy 6: Archaeological Resources Discovered during Construction or through Other Activities

CHAPTER 13: AIR QUALITY

POLICY FOR AIR QUALITY

The following policy addresses the Coastal Act concern for air quality:

Policy 1: Air Quality

The county will provide adequate administration and enforcement of air quality programs and regulations to be
consistent with the county's Air Pollution Control District and the State Air Resources Control Board. [THIS
POLICY SHALL BE IMPLEMENTED AS A STANDARD AND PURSUANT TO SECTION 23.06.080 OF
THE CZLUO.]

Chapter Page

Policy 3: Low Cost Facilities
Larger visitor-serving projects shall make provisions for services which are geared to a range of costs, including
low cost facilities. [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD.]

Policy 4: Visitor-Serving Uses in Agricultural Areas
Where visitor-serving facilities are proposed within areas designated as agriculture on the LUE, the findings
specified in agriculture Policy 3 as implemented in the CZLUO in the Agriculture chapter shall be met. [THIS
POLICY SHALL BE IMPLEMENTED AS A STANDARD.]

Policy 9: Construction Requirements
In sensitive resource areas the extent of construction and ground surface disturbance shall be reduced to a minimum by restricting construction activities and equipment within narrow, limited and staked work corridors and storage areas. [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD.]

Policy 10: Site Restoration
Upon completion of pipeline construction the site shall be restored to the approximate pre-construction condition.
Measures shall be taken during the restoration effort to protect and enhance wetland habitats in accordance with
the habitat protection, erosion, and revegetation policies of the Plan. A revegetation program shall be required
where it is determined that a disturbed area would not naturally re-vegetate sufficiently quickly to prevent
substantial erosion or disruption of adjacent habitat. If necessary, required revegetation techniques would be

determined based upon an investigation conducted by a qualified biologist. Additional measures necessary to
prevent erosion until the vegetation is established may also be required. [THIS POLICY SHALL BE
IMPLEMENTED AS A STANDARD.]

Policy 11: Geologic Requirements

Geologic investigations shall be performed by a qualified geologist or engineering geologist where a proposed
petroleum pipeline route crosses potential fault zones, seismically active areas, or moderately high to high risk
landslide areas as identified in the Geologic Study Area combining designation, the Seismic Safety Element or
inferred by more recent studies or investigations. This report shall investigate the potential risk and shall
recommend such mitigation measures as pipeline route changes and or engineering measures to help assure the
integrity of the pipeline and minimize erosion, geologic instability, and substantial alterations of the natural
topography. [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD.]

Policy 12: Pipeline Consolidation

New pipeline corridors shall be consolidated within existing pipeline or electrical transmission corridors where
feasible unless there are overriding technical constraints or significant social, aesthetic, environmental, or economic
concerns. [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD.]

Policy 1: Land Uses Within or Adjacent to Environmentally Sensitive Habitats

New development within or adjacent to locations of environmentally sensitive habitats (within 100 feet unless sites
further removed would significantly disrupt the habitat) shall not significantly disrupt the resource. Within an
existing resource, only those uses dependent on such resources shall be allowed within the area. [THIS POLICY
SHALL BE IMPLEMENTED PURSUANT TO SECTIONS 23.07.170-178 OF THE COASTAL ZONE LAND
USE ORDINANCE (CZLUO).]

Policy 2: Permit Requirement

As a condition of permit approval, the applicant is required to demonstrate that there will be no significant impact
on sensitive habitats and that proposed development or activities will be consistent with the biological continuance
of the habitat. This shall include an evaluation of the site prepared by a qualified professional which provides: a)
the maximum feasible mitigation measures (where appropriate), and b) a program for monitoring and evaluating
the effectiveness of mitigation measures where appropriate. [THIS POLICY SHALL BE IMPLEMENTED
PURSUANT TO SECTIONS 23.07.170-178 OF THE CZLUO.]

COASTAL PLANT communities depend on fungal layer below grade TO feed TAKES long time: PLAN specifics LACKING

Policy 3: Habitat Restoration
The county or Coastal Commission should require the restoration of damaged habitats as a condition of approval
when feasible. Detailed wetlands restoration criteria are discussed in Policy 11. [THIS POLICY SHALL BE
IMPLEMENTED PURSUANT TO SECTION 23.07.170 OF THE CZLUO.]

Policy 5: Supporting Greenbelt Formation and Maintenance
The county shall continue programs and policies that support greenbelt and open space areas on the urban fringe
of coastal communities. In conjunction with the development of Habitat Conservation Plans (HCP's), certain
greenbelt areas may be suitable as habitat mitigation banks to help offset impacts from development in adjacent
urban areas. Other areas may be best utilized for open space, agriculture, or public recreation. Mitigation banking
shall be further evaluated as a potential

"Wetland" is defined as land where the water table is at, near, or above the land surface long enough to do
either of the following: a) promote the formation of (hydric) soils that are saturated with water at or near
the surface and are deficient of oxygen long enough during the growing season to result in soil properties

that reflect dominate wetness characteristics near the soil surface (within 10"); or b) support the growth
of hydrophytic plants which grow in water or in wet habitats.
The primary wetland areas within San Luis Obispo County include: San Carpoforo Creek Lagoon, Arroyo de La
Cruz Creek Lagoon, San Simeon Creek Lagoon, Santa Rosa Creek Lagoon, Pico Creek Lagoon, Morro Bay
(includes Sweet Springs, Cuesta-by-the-Sea Marsh and Los Osos Estuary), Pismo Marsh, Oceano Lagoon, Dune
Lakes, Oso Flaco Lake and the Santa Maria River mouth. East of these wetlands is identified as a Sensitive
Resource Area and specific recommendations are included in the Land Use Element by planning area. Other

Policy 7: Protection of Environmentally Sensitive Habitats
Coastal wetlands are recognized as environmentally sensitive habitat areas. The natural ecological functioning and productivity of wetlands and estuaries shall be protected, preserved and where feasible, restored. [THIS POLICY SHALL BE IMPLEMENTED PURSUANT TO SECTIONS 23.07.170-178 OF THE CZLUO.]

Policy 8: Principally Permitted Use

Principally permitted uses in wetlands are as follows: hunting, fishing and wildlife management; education and
research projects. [THIS POLICY SHALL BE IMPLEMENTED PURSUANT TO SECTIONS 23.07.170-172
OF THE CZLUO.]

Policy 9: Public Acquisition
The California Department of Parks and Recreation, the California Department of Fish and Game and other public
and private sources should be encouraged to acquire or accept offers-to-dedicate coastal wetlands wherever
possible.
Priorities for acquisition should be:
. Sweet Springs Marsh
. Santa Maria River mouth
. Villa Creek Lagoon
. Properties surrounding Morro Bay which include wetland habitat.
[THIS POLICY SHALL BE IMPLEMENTED AS A PROGRAM.]

Policy 10: Open Space Easements and Williamson Act Contracts
San Luis Obispo County shall continue to encourage the use of open space easements or Williamson Act contracts
to ensure preservation of coastal wetlands. The county will develop guidelines to facilitate use of open space
easements to include requirements for length of dedication (i.e., perpetuity or 10 years), appropriate management
responsibility, etc. [THIS POLICY SHALL BE IMPLEMENTED AS A PROGRAM.]

Policy 11: Regional Water Quality Control Board "208" Program
California Regional Water Quality Control Board shall administer programs identified through the "208" nonpoint
source studies to ensure protection of coastal wetlands and water quality. (The county has incorporated the Basin
Plan Amendment requirements into the COASTAL ZONE Land Use Ordinance.) [THIS POLICY SHALL BE
IMPLEMENTED AS A PROGRAM.]
Policy 12: State Department of

Policy 15: Vehicle Traffic in Wetlands
No vehicle traffic shall be permitted in wetlands. This shall not restrict local and state agencies or the property
owner from completing the actions necessary to accomplish a permitted use within the wetland. Pedestrian traffic
shall be regulated and incidental to the permitted uses. [THIS POLICY SHALL BE IMPLEMENTED AS A
STANDARD.]

Policy 16: Adjacent Development
Development adjacent to coastal wetlands shall be sited and designed to prevent significant impacts to wetlands

through noise, sediment or other disturbances. Development shall be located as far away from the wetland as feasible, consistent with other habitat values on the site. [THIS POLICY SHALL BE IMPLEMENTED PURSUANT TO SECTION 23.07.172 OF THE CZLUO.]

GRAVITY LIFT STATIONS AT WETLANDS. STEP NOT IMPACTING WETLANDS

Policy 17: Wetland Buffer

In new development, a buffer strip shall be required and maintained in natural condition along the periphery of all wetlands. This shall be a minimum of 100 feet in width measured from the upland extent of the wetland unless a more detailed requirement for a greater or lesser amount is included in the LUE or the LUO would allow for adjustment to recognize the constraints which the minimum buffer would impose upon existing subdivided lots. If a project involves substantial improvements or increased human impacts, necessitating a wide buffer area, it shall be limited to utility lines, pipelines, drainage and flood control facilities, bridges and road approaches to bridges, and roads when it can be demonstrated that: a) alternative routes are infeasible or more environmentally damaging, and b) the adverse environmental effects are mitigated to the maximum extent feasible. Access paths and/ or fences necessary to protect habitats may also be permitted.

The minimum buffer strip may be adjusted by the county if the minimum setback standard would render the parcel

physically unusable for the principal permitted use. To allow a reduction in the minimum standard set-back, it must

be found that the development cannot be designed to provide for the standard. When such reductions are permitted, the minimum standard shall be reduced to only the point at which the principal permitted use (development), modified as much as is practical from a design standpoint, can be accommodated. At no point shall this buffer be less than 25 feet. [THIS POLICY SHALL BE IMPLEMENTED PURSUANT TO SECTION

23.07.172 OF THE CZLUO.]

Policy 20: Coastal Streams and Riparian Vegetation

Coastal streams and adjoining riparian vegetation are environmentally sensitive habitat areas and the natural

hydrological system and ecological function of coastal streams shall be protected and preserved. [THIS POLICY

SHALL BE IMPLEMENTED AS A STANDARD AND PURSUANT TO SECTION 23.07.174 OF THE

CZLUO.]

Policy 30: Protection of Native Vegetation

Native trees and plant cover shall be protected wherever possible. Native plants shall be used where vegetation

is removed. [THIS POLICY SHALL BE IMPLEMENTED PURSUANT TO SECTION 23.07.176 OF THE

CZLUO.]

Policy 35: Protection of Vegetation

Vegetation which is rare or endangered or serves as cover for endangered wildlife shall be protected against any

significant disruption of habitat value. All development shall be designed to disturb the minimum amount possible

of wildlife or plant habitat. [THIS POLICY SHALL BE IMPLEMENTED PURSUANT TO SECTION 23.07.176

OF THE CZLUO.]

Policy 36: Protection of Dune Vegetation

Disturbance or destruction of any dune vegetation shall be limited to those projects which are dependent upon such resources where no feasible alternatives exist and then shall be limited to the smallest area possible. Development activities and uses within dune vegetation shall protect the dune resources and shall be limited to resource dependent, scientific, educational and passive recreational uses. Coastal dependent uses may be permitted if it can be shown that no alternative location is feasible, such development is sited and designed to minimize impacts to dune habitat and adverse environmental impacts are mitigated to the maximum extent feasible. Revegetation with California native plant species propagated from the disturbed sites or from the same species at adjacent sites shall be necessary for all projects. [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD

Permitted Uses on Prime Agricultural Lands. Principal permitted and allowable uses on prime agricultural lands are designated on Coastal Table O - Allowable Use Chart in Framework for Planning Document. These uses may be permitted where it can be demonstrated that no alternative building site exists except on the prime agricultural soils, that the least amount of prime soil possible is converted and that the use will not conflict with surrounding agricultural lands and uses.

Permitted Uses on Non-Prime Agricultural Lands. Principal permitted and allowable uses on non-prime agricultural lands are designated on Coastal Table O - Allowable Use Chart in Framework for Planning Document. These uses may be permitted where it can be demonstrated that no alternative building site exists except on non-agricultural soils, that the least amount on non-prime land possible is converted and that the use will not conflict with surrounding agricultural lands and uses. [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD.]

Policy 2:

Non-agricultural developments shall meet the following requirements:

a. No development is permitted on prime agricultural land. Development shall be permitted on non-prime land if it can be demonstrated that all agriculturally unsuitable land on the parcel has been developed or has been determined to be undevelopable.

b. Continued or renewed agricultural use is not feasible as determined through economic studies of existing

and potential agricultural use without the proposed supplemental use.
c. The proposed use will allow for and support the continued use of the site as a productive agricultural unit
and would preserve all prime agricultural lands.
d. The proposed use will result in no adverse effect upon the continuance or establishment of agricultural uses
on the remainder of the site or nearby and surrounding properties.
e. Clearly defined buffer areas are provided between agricultural and non-agricultural uses.
f. Adequate water resources are available to maintain habitat values and serve both the proposed development and existing and proposed agricultural operations.

g. Permitted development shall provide water and sanitary facilities on-site and no extension of urban sewer
and water services shall be permitted, other than reclaimed water for agricultural enhancement.
h. The development proposal does not require a land division and includes a means of securing the remainder
of the parcel(s) in agricultural use through agricultural easements. As a condition of approval of non-agricultural development, the county shall require the applicant to assure that the remainder of the
parcel(s) be retained in agriculture and, if appropriate, open space use by the following methods:

Policy 7: Water Supplies Cannot TRENCH Remove 3 Acre ft/yr of POTABLE WATER - 14 AR Supply
Water extractions consistent with habitat protection requirements shall give highest priority to pre- serving available
supplies for existing or expanded agricultural uses. [THIS POLICY SHALL BE IMPLEMENTED AS A
STANDARD.] STEP is sealed does not.

b. The proposed development reflects that it is an environmentally preferable alternative.
The applicant shall assume responsibility in accordance with county ordinances or the rules and regulations of the
applicable service district or other providers of services for costs of service extensions or improvements that are
required as a result of the project. Lack of proper arrangements for guaranteeing service is grounds for denial of
the project or reduction of the density that could otherwise be approved consistent with available resources. [THIS
POLICY SHALL BE IMPLEMENTED PURSUANT TO SECTION 23.04.021c (DIVISIONS OF LAND),
23.04.430 AND 23.04.432 (OTHER DEVELOPMENT) OF THE CZLUO.]
[Amended 2004, Ord. 3006]

c. Submit proposed construction projects recommended for the ensuing fiscal year to the county for review,
comment and findings as to the conformity of proposed projects with the Coastal Plan.

Policy 7: Permit Requirements
The county shall require a permit for all public works projects located within the coastal zone except:

Policy 9: Review of Treatment Works
For any development that constitutes a treatment works (PRC 30120), issuance of a permit shall be consistent with
the certified LCP and PRC 30412 and shall address the following aspects of such development:
a. The siting and visual appearance of treatment works within the coastal zone.
b. The geographic limits of the service area within the coastal zone which is to be served by the treatment
works and the timing of the extension of services to allow for phasing of development consistent with the
certified LCP.
c. Projected growth rates used to determine the sizing of treatment works.
[THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD.]

POLICIES FOR COASTAL WATERSHEDS
To implement the provisions of the Coastal Act regarding watershed management, the following policies represent a commitment that all new development ensure watershed protection.

Policy 1: Preservation of Groundwater Basins
The long-term integrity of groundwater basins within the coastal zone shall be protected. The safe yield of the groundwater basin, including return and retained water, shall not be exceeded except as part of a conjunctive use or resource management program which assures that the biological productivity of aquatic habitats are not significantly adversely impacted. [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD.]

Policy 2: Water Extractions
Extractions, impoundments and other water resource developments shall obtain all necessary county and/or state permits. All pertinent information on these uses (including water conservation opportunities and impacts on in-stream beneficial uses) will be incorporated into the data base for the Resource Management System and shall be supplemented by all available private and public water resources studies available. Groundwater levels and surface flows shall be maintained to ensure that the quality of coastal waters, wetlands and streams is sufficient to provide for optimum populations of marine organisms, and for the protection of human health. (Public works projects are discussed separately.) [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD.]

Policy 3: Monitoring of Resources
In basins where extractions are approaching groundwater limitations, the county shall require applicants to install monitoring devices and participate in water monitoring management programs. [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD AND PURSUANT TO SECTION 8.40.065 OF THE COUNTY CODE (WATER WELL REGULATIONS).]

Policy 4: Chorro and Morro Basins
The county and the city of Morro Bay will jointly develop a groundwater management program which provides for
agricultural demand and for phased urban growth consistent with available groundwater resources and with the

protection of aquatic habitats. The Chorro and Morro groundwater basins have been identified as experiencing
potential for seawater intrusion, usually during drought conditions. Development of a successful groundwater
management program for these basins necessitates coordinating both urban and agricultural/rural extractions. The
city of Morro Bay has completed an investigation of the groundwater capacity of these basins. (*City of Morro Bay,*
Preliminary Water Management Plan, February, 1981.) This includes the evaluation of existing and potential agricultural
demand. A variety of management techniques are suggested, including development of recharge basins, well site
relocations and use of reclaimed water to satisfy agricultural demands.
In the interim, before development of a management program, to ensure that agricultural and residential demand
doesn't negate the alternative management strategies, or adversely impact aquatic habitats, all development which
would cause an intensification of groundwater use in the basins shall be evaluated for conformity with the
recommended management techniques and the protection of aquatic habitats. This will apply where a development
project would require more than one acre-foot of water annually.
COASTAL WATERSHEDS
JULY 2004
9-2 COASTAL PLAN POLICIES
SUMMARY
A county/city program shall be established which would result in the following:
a. Referral of any division of land, permit activity or grading in the Morro and Chorro watershed within the
city of Morro Bay's Sphere of Influence, as contained in the coastal zone boundary, to the city for review
and comment.
b. Consideration of "Best Management Practices" during the review of permit application on agricultural
parcels or parcels suitable for agricultural use in order to control agricultural practices that would result in
sedimentation, contamination of the groundwater basin, misuse of water resources or otherwise adversely
affect the groundwater basins.
c. Water basin management planning in cooperation with other affected agencies.
[THIS POLICY SHALL BE IMPLEMENTED AS A PROGRAM EXCEPT THAT PARAGRAPH 2 SHALL
BE IMPLEMENTED AS A STANDARD.]

Policy 5: Los Osos Groundwater Management
The county Planning and Engineering Departments should work with communities, property owners and the
Regional Water Quality Control Board to develop and implement a basin-wide water management program for

the Los Osos groundwater basin which addresses:
- existing and potential agricultural demand,
- urban expansion in relation to water availability,
- groundwater quality,
- possible need for alternative liquid waste disposal,
- protection of aquatic habitats including coastal waters, streams and wetlands.
The Resource Management System of the Land Use Element provides a framework for implementing this policy
and an interim alert process for timely identification of potential resource deficiencies, so that sufficient lead time
is allowed for correcting or avoiding a problem. [THIS POLICY SHALL BE IMPLEMENTED AS A
PROGRAM.]

Policy 6: Priority for Agriculture Expansion
Agriculture shall be given priority over other land uses to ensure that existing and potential agricultural viability is
preserved, consistent with protection of aquatic habitats. [THIS POLICY SHALL BE IMPLEMENTED AS A
STANDARD

Policy 10: Drainage Provisions
Site design shall ensure THAT drainage does not increase erosion. This may be achieved either through on-site
drainage retention, or conveyance to storm drains or suitable watercourses. [THIS POLICY SHALL BE
IMPLEMENTED AS A STANDARD AND PURSUANT TO SECTION 23.05.034 OF THE CZLUO.]

Policy 11: Preserving Groundwater Recharge
In suitable recharge areas, site design and layout shall retain runoff on-site to the extent feasible to maximize
groundwater recharge and to maintain in-stream flows and riparian habitats. [THIS POLICY SHALL BE
IMPLEMENTED AS A STANDARD.]

POLICIES FOR VISUAL AND SCENIC RESOURCES
Policy 1: Protection of Visual and Scenic Resources
Unique and attractive features of the landscape, including but not limited to unusual landforms, scenic vistas and
sensitive habitats are to be preserved protected, and in visually degraded areas restored where feasible. [THIS
POLICY SHALL BE IMPLEMENTED AS A STANDARD.]

Policy 7: Preservation of Trees and Native Vegetation
The location and design of new development shall minimize the need for tree removal. When trees must be

removed to accommodate new development or because they are determined to be a safety hazard, the site is to be
replanted with similar species or other species which are reflective of the community character. [THIS POLICY
SHALL BE IMPLEMENTED PURSUANT TO SECTION 23.05.064 OF THE CZLUO.]

Policy 2: Erosion and Geologic Stability
New development shall ensure structural stability while not creating or contributing to erosion or geological
instability. [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD AND PURSUANT TO SECTION
23.07.086 OF THE CZLUO.]

Policy 3: Development Review in Hazard Areas
The county shall require a detailed review of development proposed within the geologic study area and flood hazard
combining designations as indicated on the Land Use Element maps for the coastal zone. The review shall be
performed by a qualified registered and/or certified engineering geologist and shall be adequately detailed to
provide recommendations and conclusions consistent with this plan. Residential, commercial and industrial
development shall be prohibited within the 100 year floodplain (1% chance of inundation in any year) as delineated
in the Flood Hazard combining designation except for those areas within an urban reserve line. [THIS POLICY
SHALL BE IMPLEMENTED PURSUANT TO SECTIONS 23.07.082, 23.07.084, 23.07.062 AND 23.07.066 OF
THE CZLUO.]

CHAPTER 12: ARCHAEOLOGY

POLICIES FOR ARCHAEOLOGICAL RESOURCES

Because archaeological resources are scarce and non-renewable resources, the following general policies represent
the county's commitment to ensure that any proposed development would be designed and located to minimize
its impacts on archaeological resources:

Policy 1: Protection of Archaeological Resources
The county shall provide for the protection of both known and potential archaeological resources. All available
measures, including purchase, tax relief, purchase of development rights, etc., shall be explored at the time of a
development proposal to avoid development on important archaeological sites. Where these measures are not
feasible and development will adversely affect identified archaeological or paleontological resources, adequate
mitigation shall be required. [THIS POLICY SHALL BE IMPLEMENTED AS A STANDARD.

Early identification can save both time and money for the applicant. Concerns have been raised by previous
applicants about the expense and time-consuming delay if a project is stopped. Work crews, equipment and capital
remain suspended until mitigation measures are drafted. Although all construction must cease if a site is discovered
during any phase of construction, a preliminary survey can usually determine

Early information on sensitive sites where new development is anticipated can be used to design and locate
structures and site alterations to eliminate impacts. A preliminary archaeological survey can also help facilitate the
timing of construction: if there is no evidence of the potential existence of archaeological resources, construction
can commence; if the preliminary survey does indicate the presence of archaeological resources, mitigation
measures can be designed into the development.
ARCHAEOLOGY
JULY 2004
12-2 COASTAL PLAN POLICIES
SUMMARY
Early identification can save both time and money for the applicant. Concerns have been raised by previous
applicants about the expense and time-consuming delay if a project is stopped. Work crews, equipment and capital
remain suspended until mitigation measures are drafted. Although all construction must cease if a site is discovered
during any phase of construction, a preliminary survey can usually determine the potential extent of resources and
thus avert unnecessary delays through an appropriate mitigation plan.

**Footnote: The LOWWP did not comply with the conditions of the Coastal Development Permit no HCP in place 85 total*

No earthquake recovery plan 6.8 Los Osos and 7.3 Hosgri faults within 10 miles

See Coastal Table 'O',

23.01.040 - Administration of the Coastal Zone Land Use Ordinance:
This title shall be administered by the Planning Director, who will advise the public about its requirements. The
responsibilities of the Planning Director under this title include but are not limited to the following functions, which
may be carried out by Planning Department employees under the supervision of the director.

23.01.041 - Rules of Interpretation:
Any questions about the interpretation or applicability of any provision of this title, are to be resolved as provided
by this section.

a. Effect of provisions:
(1) Minimum requirements: The regulations and standards set forth in this title are to be considered minimum requirements, which are binding upon all persons and bodies charged with administering or enforcing this title.

b. Language:
(1) Construction: When used in this title, the words "shall," "will," and "is to" are always mandatory
and not discretionary. The words "should" or "may" are permissive. The present tense includes the past and future tenses; and the future tense includes the present. The singular number includes
the plural, and the plural the singular.

(4) At the discretion of the Planning Director, allowable use interpretation requests may be forwarded
to the Planning Commission for determination. Determinations by the Planning Director may be appealed to the Planning Commission as set forth in Section 23.01.042.

f. References to state law sections. The actual language of the provisions of California State Law take
precedence over any paraphrased versions, outdated quotations, or any other allusions to state law
contained in this title.

(2) If the determination of the Planning Director is challenged by the applicant or an interested person, or if the county wishes to have a determination by the Coastal Commission as to the appropriate designation, the Planning Director shall notify the Coastal Commission by telephone of the dispute/question and shall request an Executive Director's opinion.

Processing of appeals:
(1) Timing and form of appeal. An appeal shall be filed within 14 days of the decision that is the
subject of the appeal, except where otherwise provided in this title, using the form provided by the
Planning Department in addition to any other supporting materials the appellant may wish to
furnish, explaining the reasons for the appeal. An appeal shall be filed with the Planning Director,
who shall process the appeal pursuant to this section, including scheduling the matter before the
appropriate hearing body.

b. Appeal jurisdiction: An appeal shall be heard and decided by the appeal body identified as follows,

except where another section of this title may specify a particular appeal body for the purposes of that
section.

(1) Planning Department decisions: The following decisions of the Director of Planning and Building and Planning Department staff may be appealed to the Planning Commission:

23.01.043 - Appeals to the Coastal Commission.

Decisions by the Planning Department, Planning Commission or Board of Supervisors on developments within
the Coastal Zone may be appealed to the California Coastal Commission as set forth in this section.

a. Status of appellant:

(1) Who may appeal. An appeal may be filed by an applicant, any aggrieved person, or two members
of the Coastal Commission pursuant to California Public Resources Code (PRC) Section 30625.

(2) Aggrieved person defined: As set forth in Public Resources Code Section 30801, an aggrieved
person is: anyone who, either in person or through a representative who was explicitly identified as such, appeared at a public hearing before the Planning Director, Planning Commission or Board
of Supervisors in connection with the decision or appeal of any development, or who by other appropriate means prior to a hearing, informed the county of the nature of his or her concerns, unless for good cause was unable to do either. Aggrieved person also includes the applicant for a permit.

b. Exhaustion of local appeals required. For an action on coastal development permit applications that
may be appealed to the Coastal Commission as set forth in subsection c of this section, an applicant or
aggrieved party may appeal a county action on a coastal development application to the Coastal Commission only after all possible local appeals pursuant to Section 23.01.042 have been exhausted. This
limitation shall not apply to any circumstance identified in Section 13573 of Title 14 of the California Code
of Regulations, including:

(1) A situation where an appellant was denied the right of appeal pursuant to Section 23.01.042 because county notice and hearing procedures for the action on the development did not comply with the provisions of Title 14, Division 5.5, Chapter 8, Subchapter 2 of the California Code pf Regulations; or

(2) An appeal of a county decision by two members of the Coastal Commission pursuant to Public
Resources Code Section 30625. Provided, however, that notice of Commissioners appeals shall be transmitted to the Board of Supervisors pursuant to Title 14 of the California Code of Regulations Section 13573(b) and the appeal to the Commission may be suspended pending a decision on the merits of the appeal by the Board of Supervisors. If the 23.01.043 decision of the Board modifies or reverses the previous decision, the Commissioners shall be required to file a

new appeal from that decision.
(3) Where the County charges a fee for the filing or processing of appeals of actions on coastal development projects.
c. Appealable development. As set forth in Public Resources Code Section 30603(a), and this title, an
action by the County on a permit application, including any Variance, Exception or Adjustment granted,
for any of the following projects may be appealed to the California Coastal Commission:
(1) Developments approved between the sea and the first public road paralleling the sea, or within 300
feet of the inland extent of any beach or of the mean high tide line of the sea where there is no beach.
(2) Approved developments not included in subsection c(1) of this section that are proposed to be
located on tidelands, submerged lands, public trust lands, within 100 feet of any wetland, estuary, stream, or within 300 feet of the top of the seaward face of any coastal bluff.
(3) Developments approved in areas not included in subsections c(1) or c(2) that are located in a Sensitive Coastal Resource Area, which includes:

(i) Special marine and land habitat areas, wetlands, lagoons, and estuaries mapped and designated as Environmentally Sensitive Habitats (ESHA) in the Local Coastal Plan. Does not include resource areas determined by the County to be Unmapped ESHA.
(ii) Areas possessing significant recreational value, including any "V" (Visitor Serving designation) as shown in the Land Use Element and areas in or within 100 feet of any park or recreation area.
(iii) Highly scenic areas which are identified as Sensitive Resource Areas by the Land Use Element.
(iv) Archaeological sites referenced in the California Coastline and Recreation Plan or as designated by the State Historic Preservation Officer.
(v) Special Communities or Small-Scale Neighborhoods which are significant visitor destination areas as defined by Chapter 23.11 of this title.
(vi) Areas that provide existing coastal housing or recreational opportunities for low-and moderate income persons.

d. Grounds for appeal. As required by Section 30603 of the Public Resources Code, the grounds for appeal
pursuant to this section shall be limited to an allegation that the development does not conform to the
standards set forth in the certified Local Coastal Program or the public access policies set forth in the
California Coastal Act (Section 30210 et seq. of the Public Resources Code).
The grounds for appeal of a denial of a permit pursuant to section c(5) (Major Public Works or Major
Energy Facility) shall be limited to an allegation that the development conforms to the standards set forth

in the certified Local Coastal Program and the public access policies set forth in the California Coastal Act
(Section 30210 et seq. of the Public Resources Code).
23.01.043 - 045
COASTAL ZONE LAND USE ORDINANCE
REVISED JANUARY 2009
1-17 ENACTMENT, ADMIN & AMENDMENT
e. Time for appeal to Coastal Commission. Any final action by the county on an appealable development
shall become effective after the 10-working day appeal period to the Commission in accordance with the
requirements of Section 23.02.039 and applicable provisions of the Coastal Act.
f. Notice to county of appeal to Coastal Commission. An appellant shall notify the county when
appealing to the Coastal Commission by providing the county a copy of the information required in Section
13111 of Title 14 of the California Code of Regulations.

e. Effective Date of Amendments. An amendment to this title or the San Luis Obispo County Local
Coastal Plan as certified by the California Coastal Commission shall not become effective after Board of
Supervisors adoption until the amendment is also certified by the California Coastal Commission pursuant
to Chapter 6, Article 2 of the California Coastal Act, as follows:
(1) Denial of an amendment request by the Board of Supervisors shall be final and no appeal to the
Coastal Commission shall be allowed except as provided by subsection e(2) of this section.
(2) Pursuant to Section 30515 of the Coastal Act, any person or agency authorized to undertake a
public works project or major energy facility development, who was denied a request to amend the
Local Coastal Program, may file the request for amendment with the Coastal Commission.

23.01.080 - 082
23.01.080 - Time for Judicial Review:
Any court action or proceeding to attack, review, set aside, void or annul any decision of matters set forth in this
Coastal Zone Land Use Ordinance otherwise subject to court review (other than those listed in Section 65907 of
the Government Code), or concerning any of the proceedings, acts or determinations taken, done or made before
such decisions, or to determine the reasonableness, legality or validity of any condition attached thereto, shall not
be maintained by any person unless such action or proceeding is filed within 90 days after the date such decision
becomes final. Thereafter all persons are barred from any such action or proceeding or any defense of invalidity

or unreasonableness of such decisions, proceedings, acts or determinations.

23.02.026 - Review by Other Agencies:
Planning Department review of applications filed pursuant to this chapter will include notification of the following
agencies. The purpose of notification is to inform interested agencies of proposed projects that may affect their
jurisdictions so that such agencies may provide comments on significant development proposals.
***a. Air Pollution Control District (APCD):** To be notified as set forth in Section 23.06.082 (Air Pollution*
Control District Review).
***b. California Coastal Commission:** To be notified of Minor Use Permit and Development Plan*
applications and proposed amendments to the Local Coastal Program.
***c. Engineering Department:** The county Engineering Department is to be notified of all Minor Use Permit*
and Development Plan applications regarding matters of drainage, flood hazards, water and sewer facilities,
public street access and improvements, and surface mining operations conducted on behalf of the county.
***d. Fire Department:** County fire protection agencies including the county Fire Department, the various*
county fire protection districts and the California Department of Forestry are to be notified of all Minor
Use Permit and Development Plan proposals within their respective jurisdictions.
***e. Health Department:** The county Health Department is to be notified of land use proposals pursuant to*
Section 8.06.010 (Construction Plans Required) of the County Code, or any case where a proposed use will
involve toxic or hazardous materials in larger than household quantities.
***f. Incorporated cities:** The incorporated cities of the county are to be notified of all Minor Use Permit and*
Development Plan proposals in or within one mile of their respective urban reserve lines, or other area
defined by agreement between the county and city.
***g. Regional Water Quality Control Board:** To be notified as set forth in Section 23.06.100 (Water Quality).*
***h. Special Districts:** Including community services districts, school districts and sanitary districts are to be*
notified in the same manner as incorporated cities.
***i. Public Utilities:** Public utility companies including but not limited to providers of water, gas, telephone*
and electrical services are to be notified of all Minor Use Permit and Development Plan applications.
[Amended 1995, Ord. 2715]

(ii) Consent agenda. Projects that would normally be required by Section 23.03.042 or Chapter 23.08 of this title to have Plot Plan approval, but are required to have a public hearing pursuant to Section 23.02.030f. because they constitute development that may be appealed to the Coastal Commission pursuant to Section 23.01.043, may be listed upon the Minor Use Permit hearing agenda and acted upon as a consent agenda item, at the sole discretion of the Planning Director

Where the applicant volunteers to complete an environmental impact report (EIR) pursuant to the requirements of CEQA, the additional information required by this section may be fulfilled as part of the EIR completed for the project.

23.02.035 - 036

a. Agricultural buffers: Where there is an existing agricultural use taking place on adjacent parcels and the applicant proposes an agricultural buffer, such buffer shall be shown on site plans, and incorporated into the site design or the lot configuration of the proposed land division.

b. Archeological report: The applicant shall provide an archeological surface search, prepared by a qualified individual approved by the Environmental Coordinator.

c. Botanical report: The applicant shall provide a botanical report, prepared by a qualified individual approved by the Environmental Coordinator.

d. Biological report: The applicant shall provide a biological report, prepared by a qualified individual approved by the Environmental Coordinator.

e. Building site envelopes: Any proposed building sites that minimize grading, tree removal and other potential adverse impacts, or any areas proposed for exclusion from construction activities, shall be shown on site plans for existing or proposed parcels greater than 10,000 square feet in size to demonstrate how the future development of the site(s) relates to the other information required by this section.

f. Noise study: Where required by the Noise Element or where the project adjoins a potential noise generator, a noise study shall be required to be prepared by a qualified individual approved by the Environmental Coordinator.

g. Tree inventory plan: The applicant shall provide a tree inventory plan which locates all trees, on a site plan, their size and species and any proposed for removal. The plan shall also include proposals for

replacement of trees to be removed. In areas where no trees are proposed for removal, the limits of the
wooded area may be designated by the outline of the canopy.
h. Visual Analysis: For applications that propose development along significant visual corridors, as
identified in the Open Space Element or the Land Use Element, a visual analysis shall be required to be
prepared by a qualified individual approved by the Environmental Coordinator.
i. Other information: To be based on the list(s) maintained by the Department of Planning and Building,
as allowed by Government Code Section 65940, as required for specific cases to allow adequate review of
the proposal, and determine consistency with the general plan and other applicable ordinances.
[Added 1995, Ord. 2715]

23.02.036 - Final County Action on Development Permits.
After the Review Authority has acted on an application for development, the requirements of this section apply.
a. Notice of Final County Action. Within seven calendar days of county completing its review and meeting
the requirements of subsection c. of this section, the county shall notify by first class mail the Coastal
Commission and any persons who specifically requested notice of such action by submitting a
self-addressed, stamped envelope to the county (or, where required, who paid the fee established by the

County Fee Ordinance to receive such notice) of its action. Such notice shall include conditions of
approval and written findings and the procedures for appeal of the county decision to the Coastal
Commission

c. Finality of county action. A county decision on an application for a development shall not be deemed
final until:
(1) The county decision on the application has been made and all required findings have been adopted,
including specific factual findings supporting the legal conclusions that the proposed development
is or is not in conformity with the certified Local Coastal Program and, where applicable, with the
public access and recreation policies of Chapter 3 of the Coastal Act (these can be found in Section

23.04.420 of this title and Sections 30210 through 30224 of the California Coastal Act); and
(2) When all county rights of appeal have been exhausted as set forth in Section 23.01.043b
(Exhaustion of county appeals).
(3) For actions on Land Use Permits that are not appealable to the Coastal Commission under the
standards of Section 23.01.043c, the Coastal Commission has received notice of Final County
Action as required by parts a and b of this Section; and
(4) For actions on Land Use Permits that are appealable to the Coastal Commission pursuant to
Section 23.01.043c, the standards set forth in Section 23,02,039 have been satisfied.
[Amended 1995, Ord. 2740; 2004, Ord. 3001]

23.02.038 - Changes to Approved Project:
An approved land use shall be developed or established only as shown on the project plans approved as part of the
permit application, except where otherwise provided by this section. Deviation of project design or construction
from the approved plans, and changes to the project after completion of construction may occur only as follows:
a. Except as provided by subsection b. of this section, a feature of the use or project subject to the standards
of Chapter 23.04, 23.05, 23.07 or 23.08, may be modified provided that the change requested is in
conformity with the standards of this title. Such change is to be requested in writing with appropriate
supporting materials and explanation of the reasons for the request. The Planning Director may approve
a requested change upon verification of its conformity with this title, provided that such approval shall not
modify the effective date of the land use permit.
b. Where the Environmental Coordinator determines that the change results in an increased impact to an
aspect of the project that was specifically addressed in a negative declaration or environmental impact
report of the project, or the change relates to a project feature that was specifically addressed in conditions
of approval of a Minor Use Permit or Development Plan, or that was a specific consideration by the
Review Authority in the approval of a Minor Use Permit or Development Plan, a new Minor Use Permit
or Development Plan approval shall be obtained. [Amended 1993, Ord. 2649]
[Amended 1995, Ord. 2715]

23.02.039 - Effective Date of Land Use Permit for an Appealable Project.

A decision by the county on an appeal (Section 23.01.042), Variance (Section 23.01.045), Minor Use Permit (Section
23.02.033) or Development Plan (Section 23.02.034), or for a project that is appealable to the Coastal Commission
pursuant to Section 23.01.043 shall become effective after the 10 working day appeal period to the Commission
has expired unless either of the following occur:
a. An appeal is filed in accordance with Section 13111 of Title 14 of the California Administrative Code.
b. The notice of final county action does not meet the requirements of Section 23.02.036.
When either of the circumstances in this section occur, the Coastal Commission shall, within five calendar days of
receiving notice of that circumstance, notify the county and the applicant that the effective date of the county action
has been suspended.

23.02.040 - Permit Time Limits:
An approved Plot Plan or Site Plan is valid for a period of 18 months from its effective date. A Minor Use Permit,
Development Plan or Variance is valid for 24 months after its effective date. At the end of such time period, the
land use permit shall expire and become void unless:
23.02.040 - 042
PERMIT APPLICATIONS 2-20 COASTAL ZONE LAND USE ORD.
REVISED JUNE 2004
a. Substantial site work toward establishing the authorized use has been performed (Section 23.02.042); or
b. The project is completed (Section 23.02.044); or
c. An extension has been granted (Section 23.02.050).

b. Third and final extension: The Planning Commission (or Board of Supervisors on appeal) may grant
one additional 12-month extension to an approved land use permit after the two initial extensions in
accordance with the notice, hearing, and appeal procedures required for a new development application,
subject to the same findings and standards required by Section 23.02.050a. provided that the Planning
Commission makes the following additional findings:
(1) That substantial site work could not be completed as set forth in Section 23.02.042 because of
circumstances beyond the control of the applicant; and
(2) The findings specified in Sections 23.02.050a(1), (2) and (3) above; and
(3) The findings that were required by Section 23.02.034c(4) to enable initial approval of the permit

d. Time extensions on permits issued by the Coastal Commission. A time extension on a coastal

development permit issued by the Coastal Commission shall only be granted by the Coastal Commission.

23.02.060 - Guarantees of Performance:
When required by the provisions of this title, or by conditions of approval of a Minor Use Permit or Development
Plan, appropriate security or guarantees are to be provided by the applicant as set forth in this section. A bond is
used to guarantee the proper completion of required improvements, drainage facilities, grading, revegetation, site
restoration after use, reclamation and/or removal of structures, equipment or other materials, preservation of
certain site features, or compliance with other provisions of this title or conditions of approval. The guarantee shall
be a bond or other secured contractual guarantee, unless otherwise provided in Chapter 23.08 (Special Uses). The
use of the terms bond, guarantee and security in this section shall all mean guarantees of performance.
a. Posting: The guarantee is to be posted with the Planning Department, with the county of San Luis
Obispo named as beneficiary.
b. Form of bond: A surety bond or other guarantee shall be in a form approved by the County Counsel,
including default provisions, and shall provide that in the event suit is brought upon the bond by the
county and judgment is recovered, the surety shall pay all costs incurred by the county in such suit,
including reasonable attorneys' fees to be fixed by the court.

23.02.060 - 070
c. Amount of bond: The guarantee is to be of an amount established by the Planning Director equal to the
actual cost of completing the specified improvements, restoration, or satisfying conditions of approval.
Provided, however, that where a guarantee is required by Development Plan condition of approval to
preserve identified site features, the guarantee is to be in an amount the Planning Commission deems
necessary to assure compliance with the applicable condition.
d. Release of bond: At the request of an applicant, or before the expiration of a bond or guarantee, the
Planning Director will review the project and issue a completion statement if all provisions of this title and
conditions of approval have been met. Upon issuance of the completion statement, the guarantee, bond
or cash deposit will be released. If the Planning Director determines the project does not meet the

applicable requirements, the applicant shall be notified in writing of such deficiencies. A time period for
their correction shall be mutually agreed upon by the applicant and the planning director, with the security
being held until all such requirements are satisfied.
Where no agreement is reached following written notification by the Planing Director, or where an agreed
time period for completion is exceeded, the bond shall be called.
[Amended 1995, Ord. 2715]

(8) Public works projects, where such development:
(i) Involves a state university, college, public trust lands or tidelands (which require a permit from the State Coastal Commission and must meet the requirements of Chapter 3 of the Coastal Act). In such cases, the Local Coastal Plan will serve an advisory function; or
(ii) Is a minor project that is defined as categorically exempt by Section 30610(e) of the Coastal Act because of geographic area or function and where the categorical exclusion has been approved by the Coastal Commission; or
(iii) Is the installation, testing, and placement in service or the replacement of any necessary utility connection between an existing service facility and any development approved pursuant to this division; provided that the county may, where necessary, require reasonable conditions to mitigate any adverse impacts on coastal resources including scenic resources; or

23.04.031 - Public Facilities Category.
When a proposed land division in a Public Facilities land use category is for the purpose of continuing use as a
Public Facility, the minimum parcel size may be 6,000 square feet or larger, as needed for the land use, pursuant
to Section 66428 of the Subdivision Map Act. The mini-mum size of a division for the purpose of sale for private
use shall be determined through Land Use Element amendment to designate an appropriate land use category for
private use.

23.06.040 - Noise Standards:
Sections 23.06.044-050 establish standards for acceptable exterior and interior noise levels and describe how noise
is to be measured. These standards are intended to protect persons from excessive noise levels, which are
detrimental to the public health, welfare and safety and contrary to the public interest because they can: interfere
with sleep, communication, relaxation and the full enjoyment of one's property; contribute to hearing impairment
and a wide range of adverse physiological stress conditions; and adversely affect the value of real property. It is
the intent of this chapter to protect persons from excessive levels of noise within or near various residential

development and other specified noise-sensitive land uses.
[Amended 1992, Ord. 2546]1

23.06.044 - Exterior Noise Level Standards:
The exterior noise level standards of this section are applicable when a land use affected by noise is one of the
following noise-sensitive uses which are defined in the Land Use Element and Local Coastal Plan: residential uses
listed in Table O, Framework for Planning, except for residential accessory uses and temporary dwellings; health
care services (hospitals and similar establishments only); hotels and motels; bed and breakfast facilities; schools (preschool
to secondary, college and university, specialized education and training); churches; libraries and museums;
public assembly and entertainment; offices, and outdoor sports and recreation.
a. No person shall create any noise or allow the creation of any noise at any location within the
unincorporated areas of the county on property owned, leased, occupied or otherwise controlled by such
person which causes the exterior noise level when measured at any of the preceding noise-sensitive land
uses situated in either the incorporated or unincorporated areas to exceed the noise level standards in the
following table. When the receiving noise-sensitive land use is outdoor sports and recreation, the following
noise level standards shall be increased by 10dB.
OPERATIONAL STANDARDS 6-4 COASTAL ZONE LAND USE ORDINANCE REVISED JANUARY 2009
23.06.044 - 046
EXTERIOR NOISE LEVEL STANDARDS
Daytime
(7 a.m. to 10 p.m.)
Nighttime1
(10 p.m. to 7 a.m.)
Hourly Equivalent Sound Level (Leq, dB) 50 45
Maximum level, dB 70 65
Notes:
1. Applies only to uses that operate or are occupied during nighttime hours
b.

23.06.100 - Water Quality:
a. Standards for Preventing Polluted Runoff Impacts from Non-point Sources. New development
shall be designed and located to avoid significant adverse impacts to wetlands, streams, tidepools, sensitive
plants, riparian vegetation, agricultural lands, and other environmentally sensitive habitat areas from surface
water runoff and wastewater. The following shall apply to new development:

(1) Where potentially significant adverse impacts might occur, new development shall assess potential
pollutants resulting from the development project, as well as the potential impacts of those pollutants on nearby waterways and agricultural lands. Proposed new development shall furthermore be consistent with the Central Coast Basin Plan's current water quality objectives for
ocean waters, inland surface waters, enclosed bays, and estuaries.
Where polluted surface water runoff might occur as the result of a proposed development project,
the proposed project shall be evaluated for potential impacts to critical waterway components, such as: dissolved oxygen, pH, suspended material, oil/grease, sediment, turbidity, temperature, toxicity, pesticides, chemicals, etc. Where applicable, measures shall be developed and

implemented to avoid and mitigate potentially significant adverse impacts (e.g., establish a vegetation "filter" strip between a waterway and development).
[Added 2006, Ord. 3082

vegetation "filter" strip between a waterway and development).
[Added 2006, Ord. 3082]

23.06.102 - Regional Water Quality Control Board (RWB) Review:
This section establishes a procedure for the notification of the California Central Coast Regional Water Quality
Control Board when a new land use or modification to an existing use may affect groundwater quality because of
proposed methods of disposal, or large volumes of wastewater, or because of the disturbance of natural soil
contours.
a. Applications to be transmitted: Any application filed as set forth in Chapter 23.02 (Permit Applications),
Section 23.05.020 (Grading), or Sections 23.08.170 et seq. (Resource Extraction) except for business
licenses, is to be transmitted by the Planning Department to the RWB for review where:
(1) Any proposed development of more than five dwelling units will not be connected to an existing
public sewer system;
(2) A discharge of wastewater to surface waters is proposed;
(3) A proposed waste discharge will contain toxic or hazardous materials (e.g., agricultural chemicals
or metal plating wastes);
(4) On site wastewater treatment and disposal systems other than conventional individual septic tank
absorption fields are proposed;
(5) Waste flows are expected to exceed 2,500 gallons per day;
(6) A variance from state or local water quality or construction standards is requested;

(7) A livestock specialty use as defined by the Land Use Element is proposed;
(8) A cemetery is proposed.
b. Review procedure: A copy of all applications as described above shall be forwarded to the Regional
Water Quality Control Board for review upon receipt by the Planning Department. The purposes of such
transmittal are to:
(1) Enable the RWB to determine if the proposed use or activity is required to have discharge requirements, or is subject to other regulations of the RWB.
(2) Enable the RWB to contact and advise the applicant on applicable requirements, and to advise the
Planning and Building Department of any RWB requirements:

23.06.102 - 106
(i) In the case of applications for Plot Plan approval, within 10 business days of application transmittal.
(ii) In the case of Minor Use Permit or Development Plan applications, notification of RWB requirements, special comments or recommendations to be forwarded to the Zoning Administrator or Planning Commission, shall be returned to the Planning Department no later than 10 days before the public hearing on the application.

23.06.104 - Municipal Well-head Protection: Referrals:
The purpose of this section is to protect groundwater resources from contamination by proposed development.
Minor Use Permit and Development Plan applications that propose uses within one mile of a municipal well
(locations of municipal wells may be shown in the area plans) that have the potential to release toxic or hazardous
materials (e.g., gas stations, businesses that handle hazardous wastes) shall be referred to the County Environmental
Health Division for review and appropriate recommended measures that assure protection of water quality.
Recommended measures may include, but are not limited to the following:
a. Determining the extent of areas that contribute water to municipal wells, and making further recommendations as appropriate.
b. Relocating proposed uses relative to municipal wells, especially where such uses involve the manufacture,
storage or handling of hazardous materials.
c. Concentrating or clustering development relative to the location of municipal wells.
d. Reducing the density or intensity of proposed uses.
e. Limiting the amounts of potential contaminants that may be stored or handled.
[Added 2004, Ord 3048]

23.07.010 - Purpose:
Combining designations are used to identify and highlight areas of the county having natural or built features which
are sensitive, hazardous, fragile, of cultural or educational value, or of economic value as extractable natural

CL

resources. The purpose of combining designation standards is to require project design that will give careful consideration to the land features, structures and activities identified by the combining designations. These standards provide for more detailed project review where necessary to support public safety or proper use of public resources, or to satisfy the requirements of *the California Coastal Act and the Local Coastal Plan, the certified Land Use Plan of the San Luis Obispo County Local Coastal Program.*

23.07.066
23.07.066 - Construction Standards:
a. Construction, general:
(1) No construction or grading is to limit the capacity of the floodway or increase flood heights on existing structures unless the adverse effect of the increase is rectified to the satisfaction of the Director of Public Works. In no case shall flood heights be increased above that allowed under the Federal Flood Insurance Program.
(2) Structures shall be anchored to prevent collapse, lateral movement or flotation that could result in damage to other structures or restriction of bridge openings and narrow sections of the stream or river.
(3) Service facilities such as electrical and heating equipment are to be floodproofed or constructed at minimum of one-foot above the 100-year storm flood profile level for the site.
(4) Water supply and sanitary sewage systems shall be designed to minimize infiltration of flood waters into the system and discharge from systems into flood waters.
(5) On-site waste disposal systems shall be located to avoid their being impaired or contaminated during flooding.
(6) All buildings or structures shall be located landward of mean high tide.
(7) Residential, commercial and industrial development shall be prohibited outside of urban and village reserve lines.
(8) Whenever a watercourse is to be altered or relocated, the Department of Planning and Building shall notify adjacent communities and the California Department of Water Resources and evidence of such notification shall be sent to the Federal Insurance Administration.
(9) Fully enclosed areas below the lowest floor that are subject to flooding shall be designed to automatically equalize hydrostatic flood forces on exterior walls by allowing for the entry and exit of floodwaters. Designs for meeting this requirement must either be certified by a registered professional engineer or architect or meet or exceed the following minimum criteria:
(i) A minimum of two openings having a total net area of not less than one square inch for every square foot of enclosed area subject to flooding.
(ii) The bottom of all openings shall be no higher than one foot above grade.
(iii) Openings may be equipped with screens, louvers, valves or other coverings or devices

provided that they permit the automatic entry and exit of flood waters.

23.07.066
(10) On the basis of structural plans and the depth analysis, the ground floor of all structures is to be
constructed at a minimum of one-foot above the 100-year storm flood profile level. Within any AO zone on the Flood Insurance Rate maps, this elevation shall be determined by adding one foot
to the depth number specified. If no depth is specified, structures shall be elevated a minimum of two feet above adjacent natural grade.
(11) Non-residential construction shall either be elevated in conformance with Section 23.07.066a(10)
above, or together with attendant utility and sanitary facilities, be elevated a minimum of two feet above the highest adjacent grade and be floodproofed to a minimum of one-foot above the 100-year storm flood profile level. Examples of floodproofing include, but are not limited to:
(i) Installation of watertight doors, bulkheads, and shutters.
(ii) Reinforcement of walls to resist water pressure.
(iii) Use of paints, membranes, or mortars to reduce seepage through walls.
(iv) Addition of mass or weight to structure to resist flotation.
(v) Armor protection of all fill materials from scour and/or erosion.
(12) All structures subject to inundation shall use flood resistant materials up to one foot above base
flood elevation.
b. Storage and processing: The storage or processing of materials that in time of flooding are buoyant,
flammable, or explosive; that could be injurious to human, animal, or plant life; or that may unduly affect
the capacity of the floodway or unduly increase flood heights is not permitted. Storage of other material
or equipment may be allowed if not subject to major damage by floods and if firmly anchored to prevent
flotation, or if readily removable from the area within the time available after flood warning.

Coastal High Hazard areas. The following requirements shall apply to new structures or any improvement / repair to an existing structure as specified in Section 23.07.066 in areas identified as having
special flood hazards extending from offshore to the inland limit of a primary frontal dune along an open
coast and any other area subject to high velocity waters including coastal and tidal inundation or tsunamis
as established on the maps identified in subsection 23.07.060 of this title:
(1) All buildings or structures shall be elevated on adequately anchored pilings or columns and securely anchored to such pilings or columns so that the lowest horizontal portion of the structural
members of the lowest floor (excluding the pilings or columns) is elevated to or above the base flood elevation level. The pile or column foundation and structure attached thereto is anchored

#7

Comparing STEP and Gravity Sewer - Implementing a Graywater System

Mike Saunders April 29, 2009

The separation of residential wastewater into graywater and blackwater has significant merit relative to water conservation and energy conservation. Graywater is relatively clean water that can potentially be utilized for onsite residential reuse. Sources of residential graywater include baths, showers, clothes washers, dish washers, faucets, etc. In total a family of four will utilize approximately 160 gpd of water that could be utilized for graywater.

Onsite residential reuse opportunities would include toilet flushing and irrigation. For a family of four, toilet flushing alone will consume approximately 70 gpd of water daily assuming a low flow toilet that uses 3.5 gallons per flush. An older toilet may consume as much as 140 gpd. Landscape irrigation can easily utilize another 20 gpd of water or more on average.

Up to 40% to 60% reduction in potable water usage appears possible through graywater reuse. If graywater were utilized for toilets alone, potential water savings could be 30% or more.

Separation of graywater from the wastewater stream will result in a high strength blackwater discharge to the wastewater collection system. The blackwater will have higher concentrations of solids, Nitrogen and Phosphorus. The table below shows typical wastewater strengths of blackwater and graywater.

Separate Graywater: What Happens to Wastewater Characteristics?

Consituent	Graywater Range (mg/L)	Blackwater Range (mg/L)	Domestic WW Range (mg/L)
COD	77 – 240	806 - 3138	250 - 800
BOD	26 – 130	410 - 1400	160 - 300
TSS	7 – 207	920 - 4340	390 - 1230
Total-N	3.6 – 6.4	130 - 180	20 - 70
Tot-P	0.28 – 0.779	21 - 58	4 - 12

Sources: Palmquist & Hanæus 2004 & Eriksson et al. 2003

The ability of a collection system to convey blackwater should be seriously considered. A gravity sewer system relies upon adequate flow volume to create scouring velocity in the collection pipe. In a gravity sewer pipe, a velocity of 2 ft/sec is generally stated as the velocity necessary to stop sedimentation in the gravity sewer main. Velocity in a gravity sewer main will be impacted by the pipe size, the roughness of the pipe and the slope of the pipe and the volume of flow.

If we assume that pipe size, pipe roughness and the slope of pipe are all designed with an assumption that normal wastewater flow will occur. Graywater reuse will decrease wastewater flow volume, therefore reducing flow velocities. A 40% reduction in wastewater flow rate could reduce flow velocities up to 25%.

Gravity sewer pipes that are impacted by sedimentation will require regular line cleaning to remove sediment accumulations. Line cleaning consumes water that may reduce the benefits of a graywater reuse strategy. Additionally, large equipment and additional manhours will be utilized for cleaning the sewer mains and removing sediments from the sewer system. If gravity sewer cleaning is not implemented, SSO's (sanitary sewer overflows) of high strength wastewater could result.

By comparison, a STEP system is designed to separate solids from the wastewater stream. When blackwater enters an interceptor tank, solids are retained to settle and decompose. Whether a STEP system received regular strength wastewater or high strength blackwater, it still only conveys wastewater from the clear zone that develops in the tank. Since the mass of solids retained the tank should theoretically remain unchanged, we would not anticipate that the pump-out interval would be any higher than normal.

#8

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September 21, 2007

Paavo Ogren
Deputy Director of Public Works
San Luis Obispo County Dept. of Public Works
County Government Center, Room 207
San Luis Obispo CA. 93408

Subject: I&I In Gravity Sewer Systems

Dear Mr. Ogren:

The County of San Luis Obispo created a project selection process for the Los Osos Wastewater Project that was intended to be factual and unbiased. To-date, Orenco Systems has put faith in this process. We have provided input with the confidence that our contributions would be utilized appropriately. As you know, we have continued to raise issues regarding I&I (Inflow and Infiltration) with the intent that your consultants would consider our input.

In your e-mailed response of September 5th, 2007, you stated that our concerns have already been addressed. By this statement, we have to assume that these issues have been reviewed by the County's consultant and that they have decided that they are not worthy of detailed evaluation at this time . To-date, Orenco has not been aware of any type of documentation or response that in anyway reflects the input that we have provided. If we are mistaken, please provide those responses for our records and accept our apologies for having prepared this letter.

Under the assumption that a detailed analysis of the I&I issue has not occurred we are providing this letter so that our concerns can be more clearly understood.. While we apologize for the late timing of this response, we were hopeful that the Consultant would have completed this work for you.

The Federal Pollution Control Act. Was created, "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters". Ultimately this act can be credited for created funding mechanisms such as the State Revolving Funds (SRF) program that is intended to finance this project.

The four potential project options presented to the Board of Supervisors are shown below:

Option	Collection Technology	Treatment Technology	Effluent Disposal Level	Solids Disposal Option	Sites
1.	STEP	Ponds	Level 2	Sub-Class "B"	TBD
2.	STEP	Biolac	Level 2	Sub-Class "B"	TBD
3.	Gravity	Biolac	Level 2	Sub-Class "B"	TBD
4.	Gravity	Ox. Ditch	Level 2	Sub-Class "B"	TBD

TBD = To Be Determined

It is our belief that the Viable Project Alternative Fine Screening Analysis does not accurately quantify the environmental impacts nor the costs attributable to gravity sewer I&I. Accordingly, we believe that Options 3 and 4 fall short in meeting the intent of the Federal Pollution Control Act. Additionally, our concern would extend further to the applicability of SRF funding if in fact, Options 3 and 4 actually have the potential to cause detrimental affects to the Los Osos Water Basin. In our opinion, more detailed evaluation of I&I is necessary to assure that the wastewater project will restore and maintain the chemical, physical, and biological integrity of the Los Osos Water Basin in accordance with Federal directives and guidelines.

The Viable Project Alternative Fine Screening states that "any viable project could not result in an increase in the groundwater deficit". Maintaining the existing basin balance (i.e. level 1) was considered a minimum for a viable project. **Any I&I entering the gravity sewer collection system is not recharging the groundwater,** therefore a definitive withdrawal from the basin is created, and therefore should be quantified and mitigated with regards to sea water intrusion. In this context, the proposed gravity sewer project options, as defined, may in fact be unviable projects .

Issues believed to be critical towards quantifying the impact of I&I on a gravity sewer system on the Los Osos Water Basin are as follows:

- Since the Fine Screening report has stated that STEP systems and gravity systems have dissimilar characteristics with regards to I&I, the complete financial and environmental impact should be differentiated with regards to the two technologies. The report discusses wet weather flow versus dry weather flow with a focus on plant sizing. No discussion is included regarding the impact of I&I within the Los Osos Water Basin. Average I&I (initial and long term) and total annual I&I should have been clearly quantified.
- By definition, dry weather flow is inclusive of groundwater that is infiltrated. Normally, dry weather infiltration would be groundwater infiltration that is continuous in nature. Accordingly, infiltration found in dry weather gravity sewer pipes would normally be attributable to submerged gravity sewer pipes or manholes. Los Osos would have a large portion of potentially submerged gravity sewer pipe. Accordingly, dry weather flow for STEP and gravity systems will not be equal as has been stated. Also, the I&I should not be construed to be the difference between wet weather and dry weather flow, but in fact, should be inclusive of both dry weather infiltration and wet weather infiltration or inflow.
- Wet weather flow is, by definition, a wastewater flow inclusive of stormwater. Essentially it is wastewater flows that typically occurs during a rain event. Wet weather flow is predominantly caused by Inflow and should be considered only a portion of the total I&I.
- Allowable Infiltration (not including Inflow) for ***new*** gravity sewer based on current St. Louis Obispo County Standards equates to 226 AFY (acre feet per

year). Essentially, the gravity sewer is capable of removing this amount of groundwater from the Los Osos Water Basin from day 1 of its existence. While we understand that this may not be indicative of actual total I&I, it does define the *potential* I&I risk. Additionally, I&I will increase as pipe ages. Essentially, the gravity sewer system can be viewed as a sponge that is capable of removing valuable water resources from the water basin. The City of Lathrop, California is a classic example of a relatively new PVC gravity sewer system that is experiencing extensive I&I. The correlation between the wastewater flow and a rain event (documented in the river flow) is clearly evident in the graphs shown below. The impact of I&I is now causing impacts in treatment and capacity that will be costly to the Utility rate payers of that City

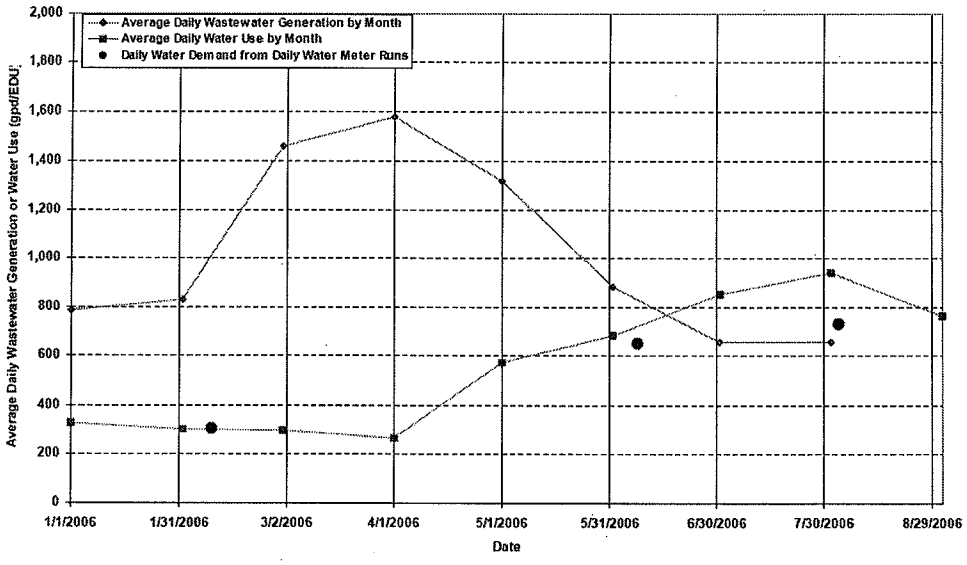
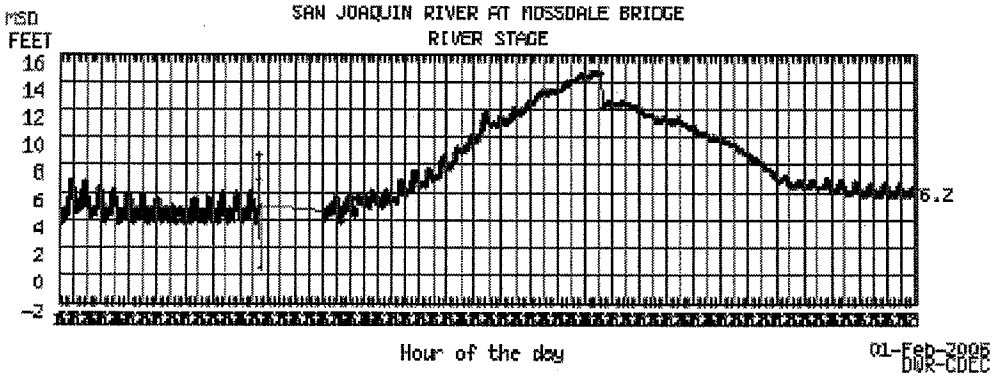


Figure 4
Average Daily Water and Wastewater Rates Per EDU Per Month – Basin 4



Data from 12/01/2005 00:00 through 02/01/2006 00:00 · Duration: 62days
Max of period: 14.72 · Min of period: .5

- The Seawater Intrusion Mitigation calculations do not include water being removed from the Los Osos Water Basin through I&I.
- Additional cost to Mitigate 226 AFY of water removal could easily add $10,000,000 to the cost of Seawater Intrusion Mitigation for Gravity Sewer.

We would anticipate that the costs associated with mitigation should actually be adequate to mitigate the cost of I&I throughout the life cycle of the gravity sewer system (50 to 70 years). Seawater Mitigation associated with I&I, at any level, appears to be a significant impact with regards to the overall cost. Mitigation for the life cycle of the gravity sewer pipe would in all likelihood be unmanageable.

- Additional Seawater Mitigation attributable to I&I could make Level 2 Seawater Mitigation unfeasible since the quantity of mitigation required could exceed the available capacity of the sites referenced under this Level.
- The County Construction Standards for gravity sewer could also permit exfiltration of raw sewage from the gravity sewer, into the Los Osos Water Basin. Any argument against Infiltration would support the possibility of exfiltration. A typical single *new* gravity sewer pipe (manhole to manhole) can pass the County testing gravity sewer testing protocol and still provide a point source discharge that equates to 60 lbs of Nitrogen annually. With more than 800 gravity sewer runs (manhole to manhole), the risk of Nitrogen discharge into the Los Osos Water Basin from a *new* gravity sewer system appears to be in direct conflict with the Nitrogen reduction intended by this project. Again, the potential Nitrogen leakage will only increase as the pipe ages.
- The California 2006/2007 State Revolving Fund Program Priority List contains 63 projects that have I&I reduction or wet weather stated in the project job title. In addition to these 63 projects that are obviously attributable to I&I, there are numerous projects that are likely attributable to I&I. These projects include equalization tankage, capacity expansion, emergency storage, sewer rehabilitation, collection systems upgrades, interceptor sewers and relief sewers. The 63 projects have a construction cost of more than $500,000,000. While SRF funds are being utilized to mitigate water quality impacts due to I&I, how can SRF funds then also finance a new project that would potentially have the same water degradation risk as the 63 projects on the SRF Priority list? Equally important, we should note that these communities are having to borrow money and adjust rate structures to pay for these impacts. The long term impacts of I&I and the associated costs are not being included as reserves within rate structures. The Fine Screening continues this oversight by not clearly including any future cost in the $450,0000 O&M cost for gravity sewer. The SRF list is available at the following link:

  http://www.swrcb.ca.gov/funding/docs/srf/0607srf_plist_adopted.pdf

Accordingly, we believe that the cost associated with gravity sewer should reflect the following:

- The cost of a "water-tight" gravity sewer system should be quantified. This cost could be necessary to qualify for SRF funding and/or grants under federal guidelines. Otherwise, gravity sewer should probably be deemed unviable under the current project configuration.
- The I&I being withdrawn from the Los Osos Water Basin should be thoroughly quantified (peak I/I, seasonal average, and long term). Also, the cost impacts in terms of Sea Water Mitigation, Capital and O&M costs should be adjusted accordingly. I&I should be defined in terms of cost throughout the life cycle (50 to 70 years) of the gravity sewer and not only at the beginning of the pipe life cycle as shown.

- The potential leakage of Nitrogen from the gravity sewer collection system (infiltration and sanitary sewer overflows) should be quantified and considered when establishing the requirements for Nitrogen reduction within the Los Osos Water Basin. Adjustments to the maximum Nitrogen discharge limits from the Treatment Plant may require adjustment to offset potential Nitrogen leakage from the gravity sewer pipe.
- Flow equalization should be added to the plant to assure flows to the treatment plant do not overcome plant headwork capacity. Again, consideration should be given to short term and long term peak flows.
- Short and long term effects from Chlorides, normally associated with gravity sewer infiltration, should be anticipated and quantified. Additional costs for treatment of Chlorides should be quantified and included in the overall project costs.
- O&M costs for gravity sewer should clearly identify reserve funds for future projects that could be required for I&I reduction and R&R (Renewal and Replacement)

Failure to consider the issues we have raised could have serious cost and environmental consequences for the residents of Los Osos. We are concerned that the project, as proposed for gravity sewer, may not provide the water quality benefits that the residents of Los Osos are assuming that they will receive. Additionally, under the current assessment model, the funding threshold may not provide adequate funding for a water-tight gravity sewer system capable of assuring lower I&I impacts. Also, if the proposed project does not satisfy the Federal Pollution Control Act, the use of SRF loans and/or grants could be compromised.

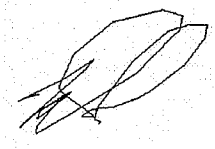
It appears that the Water Control Board, through the issuance of Cease & Desist Orders regarding the use of existing on-site septic systems has effectively sent the message that degradation of the Los Osos Water Basin will not be tolerated. Accordingly, how can a proposed option that potentially allows an increase in Sea Water Intrusion and/or Nitrogen loading relative to the current levels be considered?

Finally, the Rough Screening Analysis stated that project components would be checked for Fatal Flaws. The Fatal Flaw Analysis was described as follows:

" Fatal Flaw Analysis - An alternative will be removed from consideration if it has a characteristic that will clearly impede its implementation, from either a cost, regulatory, institutional or technical standpoint."

We believe that the analysis we have provided could very well lead to a conclusion that Options 3 and 4 are fatally flawed. For your project selection process to continue forward, as you have intended, this information should be evaluated promptly and thoroughly. We are ready, willing and able to assist in any way possible.

Respectfully,



Michael Saunders
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#9

al barrow

From: "al barrow" <a.barrow@charter.net>
Sent: Monday, September 29, 2008 11:36 PM
Subject: Fw: Larry Riao's description of Los Osos Soil structures

----- Original Message -----
From: al barrow
To: mike saunders
Cc: al barrow
Sent: Tuesday, August 19, 2008 8:12 AM
Subject: Larry Riao's description of Los Osos Soil structures

Hello Mike;
Larry is a teacher in the Cal Poly Soil Science department. Formerly in the 80's he worrked for a driller thatcontracted to Brown&Caldwell for the SLO County first sewer effort. They were sampling the ground water with piezometer drilling.
Thank You.
Al Barrow Coalition for Low Income Housing
----- Original Message -----
From: Larry E. Raio
To: albarrow
Sent: Thursday, May 12, 2005 2:34 PM
Subject: Re: Emailing: Glenns.html

Many great points brought out in this paper,

The biggest issue here is whether the proposed sewer will "correct" the nitrate problem because this is why the RWQCB has mandated the sewer. As Glen states in his paper, the point sources of the nitrate contamination has not been adequately characterized, and how can a solution be offered without truly understanding the problem; it cannot. The upper aquifer has not even been adequately characterized. I don't think anyone truly realizes how complicated and non uniform this aquifer really is mostly with respect to the shallower ground waters. I have drilled hundreds of piezometer wells (perforated pipes installed for 24 hours to measure the presence and stabilized depth to groundwater) throughout the Los Osos community, and many times I was surprised where and at what depth I found it. Los Osos has many perched water tables that I would not consider to be a part of the "upper aquifer" per se and yet these are some of the same ground waters that were tested in the Brown & Caldwell study. The placement of the Brown & Caldwell wells were in areas where there were no existing water wells that could be sampled and tested; they were to fill in the gaps. The wells were placed into the first groundwater encountered and extending 10-feet into the water. The problem with using these shallow wells (besides the fact as Glen mentions that the wells were not installed to the standards in place at the time) is that some of these wells were in these perched waters. It is important to understand the formation of what much of Los Osos is sitting on top of.

Most of Los Osos is built on top of a stabilized sand dune. You have to imagine what it was like before the plants were able to grow and stabilized it from moving. The Pismo sand dunes is a great example of sand dune that are in constant change and sculpted by the winds; unstable. During this evolution of the dunes, there can be found low spots in the middle of the dunes; little basins surround by dunes. When it rains, the silt fraction of the soil is carried with the runoff to these low areas and are deposited there. Each rain deposits more silt and it doesn't take much silt to build up before it will start holding water and cause a poorly drained condition; an 1/8-inch thick lense of silt is all it needs. As the winds continue to blow, the dunes shift, and these lenses are covered by sand and become a permanent fixture of the subsurface strata. Over thousands of years this process continues and you end up with all these subsurface lenses that hold water on top of them as it percolates through the sand. These lenses can be very small or very extensive depending on how long they developed and what the topography of the dunes were during its development. When I started installing the piezometers throughout Los Osos, I encountered one situation where I was on a level lot and encountered ground water at 8-feet. 300-feet away I encountered no ground water to a depth of 25-feet. I split the difference between these borings and still I encountered no ground water to a depth of 25-feet. I split the difference again and I encountered ground water at a depth of 12-feet, 75-feet from the first hole. Over the years, I encountered similar situations where ground water elevations were found at different levels within close proximity to each other.

The purpose of the piezometers were to verify depths to groundwater to ensure minimum separations from bottom of leachfields to groundwater. These minimum separations are determined from the percolation rate of the soil. The soil in Los Osos is very uniform and SLO County did not require percolation tests be performed on every building site for septic approval; in fact very few sites were required to do so. The percolation rate for Los Osos was assumed to be between 1 to 4 minutes/inch (how many minutes it takes water to drop 1-inch in a standard percolation hole). My experience verified this for the most part, even though I encountered soils with faster and some with slower percolation rates. The minimum separation from bottom of leachfield and groundwater with a percolation rate of 1-4 min/inch is 8-feet. A standard leachfield consisted of shallow trenches, typically with 3-feet of gravel below the perforated pipe and 2 feet of cover. With this in mind, SLO County only required a 13-foot piezometer be installed and verify that groundwater was below this depth. The short sightedness of this will become apparent. First, these are all minimum requirements, and rarely fit into real world situations. The outlet flowline of the typical septic tank is usually a minimum of 3-feet below the surface. Allowing another 1-foot fall from septic tank to leachfield places the top of the leachfield at 4-feet below the surface. Add 3-feet of gravel and this puts the bottom of leachfield at 7-feet below the surface requiring groundwater to be 15 feet or greater. This scenario is for level lot; lots that slope down to the leachfield can maintain minimum separations, and lots that slope up require more. But actually this isn't as big a problem as what comes next. Most leachfields installed in Los Osos are NOT of the leach trench type; these were typically only installed when the system was required to be engineered. What was typically installed were leach pits; a type of leachfield that has no standard. It is not the leach pit that is described in the Uniform Plumbing Code (UPC). These pits were deep holes dug with a backhoe, usually as deep as it could dig, typically 14-feet. The hole was then filled with a truck and trailer load of gravel; about 25 cubic yards. A vertical perforated stand pipe was placed in the center of the pit, extending from the bottom of the pit and connected to the outlet pipe from the septic tank. Here's the problem. Suppose groundwater is at 14-feet below the surface. A piezometer installed to 13-feet measures no groundwater encountered. The County gives their OK for development and allows a leach pit to be installed (you have to ask yourself why they are allowing 14-foot pits without at least a 22-foot piezometer, but they did in many cases). The contractor excavates the pit and encounters groundwater at 14-feet (when you encounter groundwater in an excavation in sand you can't dig further because the hole caves in at the water level). The contractor now places the vertical pipe in the hole and backfills with gravel. What you end up with is a direct conduit for the effluent to enter the groundwater without filtration through the soil.

The septic tank breaks down our household waste anaerobically, and breaks down most of the solids into liquids. Only the liquids go into the leachfield where it not only can be filtered by the soil but also broken down aerobically. If the effluent enters directly into the groundwater, there is no aerobic breakdown because there is no free oxygen in the groundwater. There are many systems installed in Los Osos where the bottoms of the leachfields are in the groundwater or in close proximity to it. Another reason why this occurred is because SLO County did not require piezometers be installed and monitored through the wet season. As most of us know, groundwater levels fluctuate seasonably and from one year to the next, and they can fluctuate quite dramatically. So a piezometer measuring water levels in the summer will not reflect water levels after high amounts of rainfall are encountered, yet this was not taken into consideration. Some have asked how a leachfield can work if its in groundwater; why doesn't it fail. The answer is simply that water will always seek its own level; the effluent simply enters the groundwater and seeks that level no problem. The system won't "fail" until the water level reaches the same elevation as the outlet of the septic tank; and then it will work again as the water lever subsides as the dry season approaches.

I agree with Glen's discussion in Section 11 about pumping groundwater from the upper aquifer and recharging the lower aquifer with that water. It will help increase groundwater separations, increase our drinking water supply, and help combat saltwater intrusion. For years, I have felt the need to increase groundwater separations from leahfields. A solution I had envisioned was to punch through the restrictive lenses holding up the water with gravel columns and allow the to drain to deeper levels. This would also solve some surface drainage problems which in some areas due to ground water levels being at or near ground surface levels. Los Osos is unique in many ways as compared to other communities. Common sense indicates that a community of this size should be sewered. That how this whole mess started. The community was growing and it seemed to make sense that it should be sewered. There was federal grant money for sewers so lets go try to get some of it. But to get it, we need a study that there is a need for it. SLO County wanted the sewer and they bought a study that proved they needed it; the Brown & Caldwell report. Or should I call it the Brown & Caldwell and SLO County report. If you recall, the County didn't want to pay Brown & Caldwell the price tag that they were asking so they looked for ways of reducing the cost. One way was for the County to sample the wells and perform the chemical tests on those samples (unsupervised). Another way is to put sub-standard monitoring wells in and not install enough of them to properly characterize the complicated groundwater conditions of Los Osos. I also question whether the wells were properly purged before sampling.

Each well was fitted with a 3-foot, 1-inch diameter hand bailer attached to a rope. The reason there was a hole in the top of the cap covering the well was that the rope was placed through the hole and a knot tied to prevent the bailer from falling in. According to my calculations it would take 25 –30 bails to properly purge the hole. Doing this by hand in a 90-foot hole is not only very time consuming but also very strenuous. Then there is the problem of contamination from the rope attached to the bailer. Was it placed on the ground surface as the bailer was raised each time and did it contaminate the well each and every time the well was bailed; probably. Again, we just needed a study to prove we needed a sewer so we could get the funding, and we got one. Too bad for us there was no funding available by the time the study was done. But we did end up with a study saying that we need a sewer and that's what we have now.

Another issue that needs to be kept in mind, in one that Dr Rhuer discussed, and that is that the soils in Los Osos are relatively infertile, and that many of the native plants that have adapted well to these soils, are nitrogen fixing plants. These plants have a symbiotic relationship with soil microorganisms and create there own nitrogen for survival. So nature has added its own nitrogen into the system and should not be ignored as a possible source for some of the nitrogen levels in the subsurface water.

I was amused by Sorrel Marks comments. I didn't know the RWQCB could make distinctions based on cost. How would she know it would cost too much to sewer high on the hill? If this is true about it costing too much, doesn't the proposed sewer cost too much? How much is too much? Much of the cost is for the installation of the gravity flow sewer pipe that can't gravity flow very well because of the undulating surface topography, thus requiring numerous lift stations. You could probably sewer the entire hill without one lift station; there's a lot of gravity in that hill! Who did the cost analysis on how much it would cost to sewer the hill? Also, there are areas of perched water up on the hill. How come there were no studies done up there? I have to agree with Glen, that a lot of what's being mandated by the RWQCB is by the seat of the pants and has little scientific basis.

If you look at Los Osos in the big picture, you have a community of homes with septic systems built on a soil that is ideally suited for septic systems. Most communities of this size would not fare well on septic systems due to soil restrictions; Los Osos is an exception. Water is pumped from the lower aquifer and used in every home, and then this water is put back in the ground and, because each house is putting it back, this water recharges the upper aquifer uniformly over the entire Los Osos area. Unfortunately this does not recharge the lower aquifer, which urgently needs to be done. Pumping the upper into the lower is one way of accomplishing this. Another is by using less of the lower aquifer water. I would estimate that more than 50% of our water usage is for irrigation. If the upper aquifer water was also used for this, which is in ready supply, it would cut consumption in half, while increasing the of groundwater to leachfield to separation which will improve the quality of the upper aquifer water.

Larry Raio

From: albarrow <abarrow@sbcglobal.net>
Date: Wed, 11 May 2005 03:40:20 -0700
To: <lraio@calpoly.edu>
Cc: <birgie1326@sbcglobal.net>, <abarrow@sbcglobal.net>
Subject: Emailing: Glenns.html

Hello Larry]
Please comment on this;
Thank You,
Al Barrow C.A.S.E.
The message is ready to be sent with the following file or link attachments:
Glenns.html

Note: To protect against computer viruses, e-mail programs may prevent sending or receiving certain types of file attachments. Check your e-mail security settings to determine how attachments are handled.

#10

al barrow

From: "al barrow" <a.barrow@charter.net>
Sent: Monday, September 29, 2008 11:35 PM
Subject: Fw: Dirt cost by the yard

----- Original Message -----
From: al barrow
To: billbowne@comcast.net
Cc: al barrow
Sent: Wednesday, July 30, 2008 11:37 AM
Subject: Fw: Dirt cost by the yard

Hello Bill;
Wet weather storage or treatment ponds have dirt moving costs. Here is an estimate from a local, Madonna construction. It is a little old but in the ballpark.
Thank You.
Al Barrow Coalition for Low Income Housing

----- Original Message -----
From: Tom Simmer
To: albarrow
Sent: Thursday, March 31, 2005 8:30 AM
Subject: RE: Dirt cost by the yard

As per our conversation, I have done a little estimating. If the dirt is rippable with a D-9 or smaller, and easily compacted, it should be able to be moved and compacted for $ 2.00 or less per cubic yard. This would be based on approximately 200,000 cubic yards of dirt and follow the below listed guidelines.

1-easily rippable
2-easily compactable
3-not rocky
4-moved to within 600 feet
5-water supply within 1/2 mile
6-no engineering or surveying included
7-no finish grading included
8-no compaction testing included
9-no pond lining included

Cost for the above items need to be added in.

> -----Original Message-----
> **From:** albarrow [mailto:abarrow@sbcglobal.net]
> **Sent:** Wednesday, March 30, 2005 9:45 AM
> **To:** tom@jmadonna.com
> **Cc:** abarrow@sbcglobal.net
> **Subject:** Dirt cost by the yard
>
> Hello Tom;
> To make some ponds 14 acres 15 feet deep. We need to know cubic yards cost. You mentioned $1.50 to $2.00 including water tender and grader etc.
> Please reply with a preliminary cost per yard to move clay soil to make excavation.
> Thank You,
> Al Barrow C.A.S.E.

#11

San Luis Obispo County Treated Sewage Sludge / Biosolids Land Application Task Force Report & Recommendations to SLO Co. Board of Supervisors
October 26, 2001

BACKGROUND

An application to apply treated sewage sludge or biosolids on a thousand acres near San Miguel led to public controversy and a determination by the Regional Water Quality Control Board (RWQCB), in May of 1998, to require an Environmental Impact Report (EIR) for the project. Although that project was withdrawn due to the EIR requirement, continued public concern regarding potential health effects and the lack of regulation within the County led the Health Commission to form a task force to study these issues. That initial task force met during 1998 and 1999, and produced the report, *"Biosolids: An Overview and Recommendations for Land Application in San Luis Obispo County."* Details of this history are contained in the Introduction to that previous task force report. In part, this effort was responsive to policies in the Agriculture & Open Space Element of the County General Plan. Policy AGP13 b reads as follows:

The county should carefully evaluate and work cooperatively with appropriate state and federal agencies, local organizations and land owners to determine whether and under what circumstances bio-solids are appropriate for land disposal.
Discussion: The county should evaluate the issues associated with land applications of bio-solids (sludge). If it is determined that there are benefits to agriculture to allow such applications, guidelines should be prepared to specify how and where such materials may be applied. The county Agricultural Commissioner, Environmental Health Department and the Department of Planning and Building should work cooperatively with U.C. Cooperative Extension, the Regional Water Quality Control Board, waste generators, land owners, researchers and environmental organizations to carefully evaluate this issue to determine the appropriate actions to take.

A similar policy, OSP 16d, is contained in the Open Space portion of the Element:

The county should carefully evaluate, in conjunction with state and federal agencies and local organizations, whether and under what circumstances bio-solids are appropriate for disposal on open space lands.

The work of the Health Commission task force described above was the first step in this effort, and resulted in recommendations from the task force, the Health Commission and the Agricultural Commissioner's office to develop a County-based program to ensure local control and oversight of biosolids management and disposition.
On February 8, 2000, the Board of Supervisors considered seven options or approaches to regulating the land application of treated sewage sludge/biosolids. The options ranged from no regulatory action by the County, to a complete ban on land application. The Board shortened the list of options by deleting three, and then directed staff of the

Environmental Health Division to proceed with the next phase in developing a local ordinance to address the matter. In providing this direction, three essential charges were given to staff and the Task Force:

First, the Environmental Health Division was to convene a public working group or Task Force to review and make recommendations from the narrowed list of policy choices for a local ordinance to control the land application of treated sewage sludge/biosolids. The four remaining options to be considered were:

1. Create a local ordinance based on federal and state regulations providing local control and oversight of how, when and where biosolids may be applied in San Luis Obispo County. A public education campaign as described ... would be implemented concurrently. [The education campaign would focus on the nature of biosolids production, the public's (commercial and residential) ability to positively affect the quality of biosolids created, responsibility of safe production and disposal of biosolids material and the potential risks and benefits of biosolids land application.]
2. Create a local ordinance establishing more stringent requirements for quality of acceptable biosolids material, as well as local control and oversight of how, when and where biosolids may be applied. A public education campaign as described [above] would be implemented concurrently.
3. Create a local ordinance limiting biosolids land application to "exceptional quality" (EQ), the highest quality grade of biosolids as defined by existing federal regulations. Local measures for control and oversight would also be established, and a public education campaign as described ... would be implemented concurrently.
4. Create an interim ban on biosolids land application while the workgroup conducts an evaluation to determine whether the ban should be lifted or remain in place. A public education campaign as described ... would be implemented concurrently.

The second charge given to staff and the Task Force was to ensure the process incorporated diverse points of view. Recommendations to increase participation in the Task Force were adopted by the Board of Supervisors and funds were allocated for a consultant to help with the collaborative process. The product of the Task Force work was to reflect consideration of broad input from the community, affected land owners, technical specialists, environmental groups, and agencies involved in the management of treated sewage sludge/biosolids.

Third, several core issues to be considered in the deliberations were identified in the February 8, 2000 staff report. These formed the basis for discussions and recommendations regarding specific concerns to be addressed in the formulation of a local control ordinance.

Over the course of the last year, the Task Force met 20 times. With the presentation of this report and recommendations, all three of the above charges are fulfilled and guidance is provided for the next step in the process of developing a local ordinance for control of the land application of treated sewage sludge/biosolids in the County.

PRIMARY RECOMMENDATION

The primary recommendation of the Task Force is contained in the following motions, which were adopted over the course of several meetings by a majority of the Task Force members:

Identify Option No. 2 as the primary recommendation of the Task Force.
[Create a local ordinance establishing more stringent requirements for quality of acceptable biosolids material, as well as local control and oversight of how, when and where biosolids may be applied. A public education campaign as described [above] would be implemented concurrently.]

Local standards for sewage sludge quality shall be derived from but not limited to state and federal regulations.

San Luis Obispo County should adopt a sewage sludge land application ordinance using pollution accumulation limits, considering local soil pollutant levels.

San Luis Obispo County should incorporate into an ordinance a comprehensive set of constituents including heavy metals, synthetic chemicals, pathogens and other pollutants not limited to those in current state and federal standards, for setting sewage sludge quality and land accumulation limits.

The County should establish a limitation on accepting or processing new land application projects for treated sludge beyond historical amounts of EQ treated sewage sludge until completion of the local ordinance to control and regulate land application of treated sludge. (EQ is "exceptional quality" material, as defined in the federal regulations 40 CFR 503.)

In developing an ordinance San Luis Obispo County should consider all feasible methods of treated sewage sludge/biosolids management and their relative impacts.

ADDITIONAL RECOMMENDATIONS

The Task Force considered a series of more detailed motions dealing with some of the major issues and concerns that need to be addressed by the ordinance. Recommendations made by a majority of the Task Force members are summarized as follows:

Notification and Public Information
San Luis Obispo County should incorporate into an ordinance:

specific procedures to ensure adequate public & community notification of project proposals, including opportunities to comment regarding them.

specific testing, written notification & reporting procedures to ensure consumers receive comprehensive information about treated sewage sludge/biosolids content, source, and usage guidelines.

specific procedures for delivering a notification to recipient landowners and users as to the potential problems and benefits associated with the use &/or misuse of treated sewage sludge/biosolids, and for obtaining formal & prior informed consent.

specific procedures to ensure property records document any land application activity and the availability of information regarding that activity, so prospective land purchasers and appraisers may be fully informed.

Fees and Financial Considerations
San Luis Obispo County should incorporate into an ordinance:

specific procedures to ensure that the fees imposed upon each project are sufficient to fund required assessment, monitoring & oversight activities.

provisions for the assessment of fines and/or penalties in case of violations to effectively and rapidly enforce its regulations.

requirements for project proponents to post performance bonds & obtain insurance coverage, including pollution liability, to recompense parties potentially impacted by related remediation and/or litigation.

General Use and Site Prohibitions
In preparing its ordinance, San Luis Obispo County should consider how, when, where, and whether treated sewage sludge/biosolids should be applied to:

a. Human Food-Chain Crops
b. Animal Feed Crops
c. Grazing, Pasture Land
d. Agricultural Soil Classifications
e. Home Gardens
f. Home Lawns
g. Public Parks
h. School Playgrounds
i. Sports Fields
j. Forests
k. Sensitive Ecological Areas & Species

Program and Project Requirements
In preparing its ordinance, San Luis Obispo County should consider provisions related but not limited to:

a. Transportation requirements
b. Buffer Zones / Set Back Distances
c. Water Supply Protection
d. Wind Speed Limits
e. Monitoring of heavy metals, pathogens, and other constituents.
f. Weather / Season
g. Incorporation into Soil
h. Runoff Protection
i. Erosion Control
j. Agronomic Rates
k. Crop Limitations

#12

flowsandloadscomments

May 5, 2008

John Waddell

San Luis Obispo County Dept. of Public Works

County Government Center, Room 207

San Luis Obispo CA. 93408

Subject: TECHNICAL MEMORANDUM FOR FLOWS AND LOADS

Dear Mr. Waddell:

Orenco Systems, Inc. has reviewed the Draft Technical Memorandum for Flows and Loads dated February 2008. We offer the following comments and/or concerns for consideration:

I. Following is a direct quote from section 3.1 of the Flow and Loadings Tech Memo:
"Gravity sewers utilize bell and spigot joint construction. Properly installed bell-and-spigot sewers will be watertight at first, and then may slowly lose their integrity as the surrounding soils shift, compressing the pipes, and compromising their seals at the joints."

Comment:

We believe that the Fine Screening Analysis eliminates a bell and spigot joint gravity sewer technology as a viable option. The Fine Screening Analysis (page 1-6) states that a "viable project" could not result in an increase in the groundwater balance deficit, maintaining the existing basin balance (i.e. level 1) was considered the minimum viable project."

In support of our belief, we offer the following observations:

•
The sentence containing the statement, "compromising their seals at the joints," depicts groundwater as the source for I/I.
•
The Fine Screening states that the newly constructed gravity collection system can expect 300,000 gallons per day of wet weather infiltration and inflow (Table 1.2 page 1-10). This number represents a minimum I/I volume acceptable for new construction standards, and does not account for settling and aging resulting in additional infiltration and inflow. Additionally, this number would not include dry weather infiltration that would be associated with the miles of submerged gravity sewer pipe.
•
In essence over the life cycle of the system, I/I risk is very high and will never get better only worse.
•
Over the systems life cycle, the gravity sewer collection system will pump an un-quantified number of acre feet per year of groundwater out of Los Osos' shallow aquifer that will ultimately be run through the treatment plant. Within the context of the Fine Screening this is defined as a groundwater balance deficit. This brings to light four significant points:

o
The Carollo Engineering proposed gravity sewer system results in an increase in the groundwater balance deficit; therefore it does not meet the criterion used in the Fine

Screening analysis to be a "viable project."
o
The gravity sewer groundwater balance deficit is unaccounted for in the sea water mitigation study both in magnitude and in cost.
o
It appears that fusion-welded PVC is the only solution that will make gravity sewer a "viable project." This cost is unaccounted for.
o
The long-term risk, or potential magnitude of I&I is not quantified in any way. Given the goals and objectives for this project, it is inevitable that Los Osos will eventually be looking at methods for mitigating the impacts of I&I in the Los Osos water basin.
II. Following is a quote from section 6.0 of the Flow and Loadings Tech Memo:
"Inflow/infiltration (I/I) estimates for the collection system alternatives were the main source of uncertainty in calculating the future treatment facility influent flow volume. If a gravity collection system is selected, only a system that was constructed of fusion-welded PVC piping could be operated with as little I/I as the other types systems. However, fusion welded PVC sewers are a fairly new technology with little long-term operating history, and can be significantly more costly to install than traditional bell-and-spigot gravity sewers."

Comment:

This quote illustrates a double standard when comparing technology options. While every effort was made to establish costs for "high-end" quality STEP system, the cost of fusion welded PVC gravity sewer was not discussed nor quantified in any way. When the r

#12

al barrow

From: "Larry Raio" <lraio@calpoly.edu>
To: "Al Barrow" <a.barrow@charter.net>
Sent: Wednesday, August 26, 2009 10:50 PM
Subject: FW: Los Osos WWTP Cost Range

------ Forwarded Message
From: al barrow <a.barrow@charter.net>
Date: Tue, 25 Aug 2009 19:25:05 -0700
To: Larry <lraio@calpoly.edu>
Cc: al barrow <a.barrow@charter.net>
Subject: Fw: Los Osos WWTP Cost Range

----- Original Message -----
From: Bill Cagle <mailto:bcagle@orenco.com>
To: 'al barrow' <mailto:a.barrow@charter.net>
Cc: 'Mike Saunders' <mailto:msaunders@orenco.com>
Sent: Tuesday, August 25, 2009 4:13 PM
Subject: Los Osos WWTP Cost Range

Sorry, this version should have the tables included.

Al,
Below is Mike's response to your question regarding cost. Can you please have your attorney explain how this statement might be used? This will help us be better prepared should we be called to question. Thanks

I have worked with Orenco Systems, Inc for 4 1/2 year. Prior to that, I was the County Utility Engineer for Charlotte County Utilities for nine years. During my time at Charlotte County, I experienced a failed conventional sewer approach (40,000 connections), executed the extension of STEP wastewater collection to 5,000 properties. The use of STEP systems in Charlotte County provided significant capital cost savings when compared to the proposed gravity system.

Charlotte County Utilities was and is the oldest and largest STEP systems in the world. It is operated in conjunction with a conventional gravity sewer system that serves more than 20,000 homes. Based on my experience and observations, I offer the following discussion relative to the perceived cost of a STEP system in Los Osos.

The "Viable Project Alternatives Fine Screening, dated August 2007. In the reports introduction it is stated that the report provided "information on what the community can expect through the County implemented solution, in terms of costs, benefits and overall approach". Presumably, this report was intended to be one of the primary documents that the residents of Los Osos will utilize in deciding their vote with regards to the County's Proposition 218.

When the public voted on the County's Proposition 218, it was our understanding that they were approving a not-to-exceed expenditure and not a project. Additionally, it is our observation that the residents of Los Osos had an expectation that the most economical approach would become the constructed project.

Prior to the release of the Fine Screening, Orenco Systems had already expressed concern regarding the omission of input that we provided. This omission of key data, while not necessarily important to

the vote, was critically important towards defining the most cost effective STEP project that was ultimately analyzed in the Fine Screening Study. Despite Orenco's vast experience with STEP projects, the consultant and the County unilaterally defined the scope of a STEP project and ultimately, the project that they defined.

Subsequent to the release of the Fine Screening Study, in a public presentation, there was statement from the County Consultants that inferred that capital costs for STEP and gravity sewer would be comparable, while the coordination of STEP installation will be more difficult.

In our opinion, the fine screening did not provide a comparison of STEP and gravity costs that adequately supported the statements made on public record.

The following table is included in the Appendix "C" of the Fine Screening Analysis. This table explains the various Categories of Estimates with regards to the level of project definition and expected accuracy.

Table 1.1 Category of Cost Estimates[1]
Los Osos Wastewater Project Development
San Luis Obispo County

	Primary Characteristic	Secondary Characteristic			
ESTIMATE CLASS	LEVEL OF PROJECT DEFINITION Expressed as % of complete definition	END USAGE	METHODOLGY Typical estimating method	EXPECTED ACCURACY RANGE Typical variation in low and high ranges [a]	PREPERATION EFFORT Typical degree of effort relative to least cost index of 1 [b]
Class 5	0% to 2%	Concept Screening	Capacity Factored, Parametric Models, Judgment, or Analogy	L: -20% to -50% H: +30% - +100%	1
Class 4[2]	1% to 15%	Concept Screening or Feasibility	Capacity Factored, Equipment Factored, Parametric Models or Analogy	L: - 15% to -30% H: +20% - +50%	2 to 4
Class 3	10% to 40%	Budget, Authorization, or Control	Semi-Detailed Unit Costs with Assembly Level Line Items	L: - 10% to -20% H: +10% - +30%	3 to 10
Class 2	30% to 70%	Control or Bid/ Tender	Detailed Unit Cost with Forced Detailed Take-Off	L: - 5% to -15% H: +5% - +20%	4 to 20
Class 1	50% to 100%	Check Estimate or Bid/Tender	Detailed Unit Cost with Detailed Take-Off	L: - 3% to -10% H: +3% - +15%	5 to 100

Notes:
1. Table 1.1 comes from the AACE International Recommended Practices and Standards, No. 18R-97.
2. Most of the estimates in the Fine Screening Report are at this level.
   a. The state of process technology and availability of applicable reference cost data affect the range markedly. The +/- value represents typical percentage variation of actual costs from the cost estimate after application of contingency (typically at a 50% level of confidence) for a give scope.
   b. If the range index value of "1" represents 0.005% of project costs, then an index value of 100 represents 0.5%. Estimate preparation effort is highly dependent upon the size of the project and the quality of estimating data and tools.

It is critical that the public understand the significance of this table. The STEP estimates from Carollo are stated to be Class 4 while the gravity sewer estimates are stated to be Class 1. The estimates for STEP are stated to be 1% to 15% of the total level of project definition required. Furthermore the accuracy of the estimate can be off by as much as 30% on the low side and 50% on the high side.

Based on the level of estimate provided, did a Class 1 estimate support the statement made by the consultant with regard to cost comparison? Furthermore, how could we conclusively state that STEP costs were actually comparable to gravity sewer? The public presentation contained no explanation regarding the potential variance in cost estimates.

The following table, also from Appendix "C" in the Fine Screening Study, further penalizes the STEP estimate for not being as accurate as the gravity sewer estimate.

Table 1.4 Basis for Estimating Project Costs Los Osos Wastewater Project Development San Luis Obispo County	
Item	Estimated Cost[1]
Obtain Base Construction Cost from Bid Tabs, previous Engineers Estimates, analogous facility costs, parametric models and/or Carollo's unit price catalog. Adjust this cost to April 2007 cost for San Luis Obispo, California. Cost includes: • Adjustment to "mid range" of bids for each item • Mobilization/Demobilization • Electrical • Site Work/Yard Piping • Sales Tax on materials only (8%) • Contractor overhead and profit (15%)	"A"
Add 30% of Subtotal Cost to Class 4 estimates and 10% to Class 1 estimates as Construction Cost Contingency.	+ 10% to 30% of "A"
Subtotal Estimated Construction Cost	"B"
Add 8% sales tax on materials and 15% for contractor overhead and profit	+ 15% to 22% of "B"
Subtotal Estimated Construction Cost	"C"
Escalate to June 2011 - 5% per year	+ 24.5% of "C"
Subtotal Escalated Estimated Construction Cost	"D"
Project Cost - will provide line items [2]	+"E"
Total Estimated Project Cost	"F"

Notes:
1. Based on June 2011 costs for San Luis Obispo, California (Estimated ENRCCI projection for the 20-Cities Average is 7879 for February 2007 and location factor adjustment is 1.054.).
2. Includes design engineering contingencies, construction management, administrative, and legal costs.

Typically, contingency is added to projects in case unforeseen costs become applicable during construction. In the context of this analysis, Carollo has added 30% contingency to STEP because there has been less detail in the estimate. Comparatively, only 10% contingency is added to gravity as a reward for a more detailed estimate. Accordingly $11,000,000 (low estimate) to $15,000,000 (high estimate) is being added to STEP that isn't being added to gravity. In practicality, due to the complexity of construction, there is much more inherent risk in gravity sewer construction than STEP construction. Change orders, for unforeseen site condition are common in virtually all gravity sewer projects of this nature despite the level of detail put forth during design. Regardless of the level of estimate, it is highly questionable to assert that contingency should be higher for STEP. When a range of cost is presented, one has to understand that a large amount of subjective costs have been allocated to the cost of STEP, thereby inflating the possible range of cost.

Furthermore, the following table (Table 3.18), again from the fine screening analysis, shows that 15% overhead and 8% taxes are added to STEP while they are omitted from gravity. Since the gravity sewer estimate is more accurate, they have stated that the gravity sewer estimate includes these costs while presumably, they can not effectively say the same about their STEP estimate. This additional cost is added before contingency is added, so the impact of the overhead and taxes is compounded by the additional contingency.

Table 3.18 Range of Probable Costs for STEP/STEG Collection System
Los Osos Wastewater Project Development
San Luis Obispo County

Item[3]	Range of Probable Costs Low ($M)[1]	High ($M)[1]	Notes on Development of Range
Mobilization/Demobilization /General Conditions	2.0	3.2	Based on 5% of Construction Cost Subtotal.
COMMON FACILITIES			
Force Mains and Laterals in Right-of-Way	11.7	15.2	Low estimate based on Los Osos Wastewater Management Plan Update (Risley 2006) and installation costs from Tidwell. High estimate includes 30% contingency due to conceptual design level.
Odor Control	0.1	0.3	Low and High estimates based on 100 and 300 air release valves respectively at $3000 each.
Road Restoration	1.3	2.6	Low and High estimates based on 25% and 50% of the gravity system requirements, respectively, due to estimated reduction in pavement disturbance.
Land and Easement Acquisition	Assumed No Additional Cost[3]	Assumed No Additional Cost[3]	
ON LOT FACILITIES			
Project Facilities	23.5	25.8	Based on on-lot options and cost development information presented above. High estimate includes 10% contingency similar to gravity system.
Homeowner Facilities	6.1	6.7	Based on on-lot options and cost development information presented above. High estimate includes 10% contingency similar to gravity system.
Electrical Connection	0.1	14.3	Low and High estimates based on $1,000 and $3,000 per connection as presented in Table 3.15 for 4769 Prohibition Zone lots.
Subtotal	$54.4	$68.1	
Overhead and Profit (15%)	$8.1	$10.2	
Subtotal	$62.3	$78.2	
Sales Tax (5%)[4]	$2.5	$3.1	
TOTAL CONSTRUCTION COST WITH BASE ELECTRICAL CONNECTION	$65.0	$81.4	
Separate Electrical Service Premium	$14.5	$24.1	
TOTAL CONSTRUCTION WITH SEPARATE ELECTRICAL SERVICE PREMIUM	$79.5	$105.5	

Notes:
(1) All costs in April 2007 dollars, based on an ENR of 7870.
(2) Prohibition Zone lots only - 4769 connections.
(3) Land and easement acquisition assumed to be sunk cost as part of the previous Tri-W project.
(4) Sales Tax included on materials only.

Also in table 3.18, the low range cost shows the separate electrical premium. The electrical premium is contingent upon a hypothetical requirement from the State Water Board that would require a public electrical supply rather than a simple service through the existing homes electrical panel. In execution, virtually all existing STEP systems installed in this Country utilize power service from the home. While this could be included in the high end cost, we believe that the low end cost should be reflective of the methodology that is actually normally used to power a STEP pump package. The $14,500,000 in additional cost again was added before contingeny, so this arbitrary cost addition was compounded by the additional contingency that was added.

What did all of this mean to the voter? We believe there are two very important points to note. They are as follows:

1) If we use Table 1.1 to restate the potential cost range of the project, the numbers are very startling. The actual range for STEP, without compromising the integrity of this Study could actually be $45.5 million to $121.5 million while the actual range of gravity could be $73.8 million to $103.5 million. Accordingly, if these technologies were bid head to head, STEP could come in at $45.5 million while gravity could come in at $103.5 million and this report wouldn't be wrong. STEP in fact, by this report, could be half the cost of gravity. This potential variance in cost was never explained to the voter.

2) If the same level of estimate had occurred, one would presume that contingency, overhead and taxes would be treated comparably for both technologies. Orenco had provided bid tabs to the County, with overhead and profit included that support a cost that is lower than the stated low cost without overhead and sales tax. Also, if the low estimate actually utilized the probable low cost of electrical supply the low end cost would be significantly different. Without Sales Tax, Overhead, Electrical Premium and with 10% contingency, our calculations show that the low estimate would be in the range of $44 million while the high estimate would be in the range of $75 million.

We do not believe that this Fine Screening Analysis adequately provided proper "information on what the community can expect through the County implemented solution, in terms of costs, benefits and overall approach". The report did not compare STEP costs and gravity costs to the degree necessary to establish true comparative costs nor does it evaluate STEP on a level playing field with gravity sewer. We do not believe that an analysis that utilized different levels of estimating is adequate to support any determination that capital costs for STEP and gravity sewer are comparable. Furthermore, it is extremely misleading to apportion subjective costs such as sales tax, overhead, electrical premium costs and contingency in a manner that is not equitable between comparative technologies.

The consultant expended large resources in modeling treatment processes and in evaluating the cost of

gravity sewer. We have to question why that the same level of resources was not applied to the STEP cost estimates so that a Class 1 estimate of STEP is available for comparison to the gravity sewer costs.

Our opinions were validated by an independent review that was done by the National Water Research Institute (NWRI). Their findings included the following:

- "Alternatives should be presented with sufficient detail in terms of description and estimated costs so that rational comparisons can be made."

- "Cost estimates should be stated clearly and compared on an equivalent basis with the same degree of variability and specificity. Refined and updated cost estimates are needed for each alternative so that decision makers and stakeholders can make informed judgments."

It does not appear that either of these NWRI recommendations was adequately addressed.

Beyond the estimates, we can take a more practical approach to discussing the provision of a STEP system in Los Osos. Orenco Systems, in the early stages of project development, recommended to the Los Osos Community Services District (LOCSD) that a Design Build approach be utilized for the procurement of a wastewater system for Los Osos. We told them that a Design Build approach, if properly executed, could deliver the ingenuity and expertise necessary to provide a low cost sewer option for Los Osos. At another meeting, we actually introduced the community to our potential Design Build team members that were ready to respond if a Design Build Request for Proposal was issued.

When the Design Build approach was finally recommended by County Staff, we believed that the process would move forward as promised. Unfortunately, during execution of the process, our team was removed. We were not removed because of our teams competency or qualifications (we may have been the most highly qualified team involved), but by the recommendation of County Staff, we were removed because we recommended STEP wastewater collection as a viable method for reducing capital cost. In fact, during our presentation to County Staff, we stated the cost will be less and we will guarantee a not-to-exceed cost. Unfortunately, we were denied the opportunity to submit a proposal and therefore, we were denied the opportunity to make the ultimate not-to-exceed cost public.

At this time, the obvious question remains. Could STEP have delivered a low-end cost in the $40 million dollar range? The Design Build team intended to work in partnership with the County, starting with the County defined STEP project, and then offering value engineering alternative that were intended to reduce the project cost. Value engineering alternatives included the following:

- The use of all or some of the existing septic tanks.

- The use of STEG (Septic Tank Effluent Gravity) systems when hydraulic conditional allowed.

- The use of alternative STEP pump packages that are available from Orenco.
- The use of decentralized treatment at sites that have a need for irrigation water.
- The use of shared interceptor tanks (2 and possibly 4 homes per tank).
- The use of community tanks in areas of high density.
- The use of remote system monitoring.
- The possibility of including an O&M service at a fixed cost.
- The possibility of utilizing an extended period for connecting customers that prioritized the "hot-spots" first.

These options were never explored by the consultant and were never conveyed to the public as alternatives for possible adjustments in capital cost.

Had the design build process moved forward and had the County partnered with our Design Build team to achieve the best value for the residents of Los Osos, a final cost in the $40 million dollar range was not only possible, but probable.

Respectfully,

Mike Saunders
Orenco Systems, Inc.

Mike Saunders
Orenco Systems, Inc.
www.orenco.com <http://www.orenco.com>

Phone: (866) 914-9454
Cell: (941) 276-8586

Respectfully,

Bill Cagle
National Accounts
Orenco Systems Inc.
www.orenco.com
bcagle@orenco.com
(P) 800.718.4046 direct
(F) 541.459.2884

------ End of Forwarded Message

al barrow

From: "Larry Raio" <lraio@calpoly.edu>
To: "Al Barrow" <a.barrow@charter.net>
Sent: Wednesday, August 26, 2009 10:49 PM
Subject: FW: Los Osos Wastewater Project STEP/STEG Collection system has been inappropriately removed

------ Forwarded Message
From: al barrow <a.barrow@charter.net>
Date: Thu, 20 Aug 2009 09:37:38 -0700
To: Jonathan Bishop <jbishop@coastal.ca.gov>, Dan Carl <dcarl@coastal.ca.gov>
Cc: Piper Reilly <getgreenlo@gmail.com>, al barrow <a.barrow@charter.net>, Ann Calhoun <churadogs2@att.net>
Subject: Re: Los Osos Wastewater Project STEP/STEG Collection system has been inappropriately removed

Dear Coastal Commissioner's:

This is a revision of the letter that I recently sent you with a few grammatical improvements...in essence the same. I hope this is clearer:
" Our position is that SLO County violated the 218 process by promising a Design/Build process that included STEP/STEG, then after the vote removing it, damaging the ratepayers with exorbitantly higher wastewater fees, charges and capital costs, when a more compliant technology is at lower costs and impacts that is also quicker to install.is already pre-designed in the LOCSD Ripley Report 2006."

Thank You,.
Al Barrow

Los Osos Legal Defense Fund
P.O Box 6931
Los Osos CA 93412 805 534-0800 Thank you for your support.

--- On **Wed, 8/19/09, al barrow <a.barrow@charter.net>** wrote:

From: al barrow <a.barrow@charter.net>
Subject: Los Osos Wastewater Project STEP/STEG Collection system has been inappropriately removed
To: "johnathan bishop" <jbishop@coastal.ca.gov>, "Dan Carl" <dcarl@coastal.ca.gov>
Cc: "Dana Ripley" <ripac@comcast.net>, "Will Lyles" <wlyles@ldico.com>, "betty winholtz" <winholtz@sbcglobal.net>, "Rosemarie Arnold" <usa2072@charter.net>, swandiego@gmail.com, "shaunna sullivan" <sullivanlaw@charter.net>, "Carl Pope, Sierra Club" <sierraclub.giving@sierraclub.org>, "Andrew Christie/Sierra Club" <sierra8@charter.net>, "steve paige" <shpaige@sbcglobal.net>, "Roy F Spalding" <rspaldin@unlnotes.unl.edu>, "Ron Crawford" <ron@slocreek.com>, "Rhian Gulassa" <rhian88@sbcglobal.net>, "vita miller" <realnurse1205@yahoo.com>, "Phyliss Caruthers" <Rcaruthe@fix.net>, peggypavek@yahoo.com, "dave akey" <pdhakey@sbcglobal.net>, patricia.renshaw@sbcgloval.net, "Orval Osborne - Creek Labs" <orval@creeklabs.com>, "mike saunders" <msaunders@orenco.com>, "Morgan Rafferty" <morgan@ecoslo.org>, MJHJ2020@aol.com, "Mary Fullwood" <Mary.Fullwood@gmail.com>, "Marie smith" <mail.1@charter.net>, "Larry" <lraio@calpoly.edu>, "shaunna"

<lososan@charter.net>, loautobody@thegrid.net, "Lisa Schicker" <lisaschicker@hotmail.com>, lindeowen@sbcglobal.net, "'Leon Goldin'" <lgoldin@charter.net>, "Karen Venditti" <kjvenditti@sbcglobal.net>, KATIELOVESEMILY@HOTMAIL.COM, "julie tacker" <julietacker@charter.net>, "jim patterson" <jpatterson@co.slo.ca.us>, "Johnbrumfield" <Johnbrumfield@charter.net>, "Jim Tkah" <jimtk@charter.net>, "Jack Hunter" <jhunter@dot.ca.gov>, "jeff edwards" <jhedwardsco@Charter.net>, "Jack Beardwood" <j.beardwood@yahoo.com>, "greenbuild" <info@slogreenbuild.org>, "Farm Bureal slo" <info@slofarmbureau.org>, "apcd" <info@slocleanair.org>, "ecoslo" <info@ecoslo.org>, "Jan Der Garabedian" <hyeder@charter.net>, "Martha Goldin" <honmgret@charter.net>, "John/Mary" <Haleyje@charter.net>, "CHUCK&CAROL CRIBBS" <h_r_advocate@hotmail.com>, "Galen Ricard PR" <grpr@charter.net>, "Gerry Spence" <gerryspence@gerryspence.com>, "gary patton" <gapatton@pcl.org>, "R. Glenn Stillman" <g.stillman@verizon.net>, "Frank Ausilo" <Fjaunion@aol.com>, "Fred Dellagatta" <fdellagatta@aehloans.com>, "Jeff Pienack" <ezjerky123@yahoo.com>, ericm@clarkvalleyfarm.com, "eric greening" <elquadrillo@charter.net>, "ARB/earl eldridge" <eeldridge@arbinc.com>, "ed ochs" <edochs@charter.net>, "duane woodman" <dwoodman@aol.com>, "David Jeffries" <dwjeff@charter.net>, "Duncan and Marlene McQueen" <dmmcqueen@charter.net>, "David Duggan" <date1969@gmail.com>, "mimi whitney" <coastoilartist@aol.com>, "ann calhoun" <Churadogs2@att.net>, carolja@fix.net, "Bo and Lacey Cooper" <boleecooper@webtv.net>, birgie1326@sbcglobal.net, billbowne@comcast.net, "bill cagle" <bcagle@orenco.com>, "Barbara Carlock" <barbara@carlocksbakery.com>, "Allen and Ricard" <allenricard@charter.net>, "Dr. C. Hite" <aaaptly@gmail.com>, a.r.martyn@worldnet.att.net
Date: Wednesday, August 19, 2009, 12:08 AM

Dear Coastal Commissioners:

SLO County promised in the 218 tax vote that funded the Los Osos Sewer project:

"In the current project selection strategy, the STEP and gravity alternatives would compete through the construction bidding phase using a competitive bid, design/build, and/or build/own/operate/transfer process. "

That was signed by the Assessment Engineer and PW Director Paavo Ogren.
But they have removed the lower impact collection system, which was adjudged in their two year fine screening process as a "viable alternative" out off the Design/Build project delivery method. Now only the most impactive project on coastal resources remains. Gravity deep trenching in liquefaction conditions is what the SLO County has chosen as their only project. A loss of 300,000 gpd of drinking water through leakage into the collection system. Gravity is many millions of dollars more cost, a cost that the lower income half of the population cannot afford, $3000.00 a year.or 8 times average cost.

In order to put STEP/STEG or vacuum collection, which are far more protective of coastal resources, we ask that you direct the SLO County to do so immediately. Something that the SLO Country planning commission did not do in their recent findings.
We also believe, in order to protect our community and environment, we must have legal counsel so we have engaged the Law offices of Jesse LB.Hill to see that the Local Coastal Plan, The Coastal Act and the supporting laws in the CZLUO are respected and that the environment is once again is not sacrificed.

We would hope that the SLO County would be sensitive to our concerns as we have submitted them, but that has not been the case in most issues of concern. As we prepare for the coming BOS and Coastal commission we ask all parties to reconsider the impact of removing a more protective and affordable collection technology.

Our position is that SLO County violated the 218 process by promising a Design/Build process that included STEP/STEG, then after the vote removing it, damaging the ratepayers with exorbitantly higher wastewater fees, charges and capital costs, when a more compliant technology is at lower costs and impacts that is also quicker to install.is already pre-designed in the LOCSD Ripley Report 2006.

SLO County admits their will be design changes required for their purportedly "shovel ready" collection system whose slopes are to shallow for solids to move through the collection pipes as the design flows are much lower than the original Montgomery Watson Harza design plans called for.

In order to avert "the train wreck" at the Coastal Commission Hearings we seek relief in the form of direction from your staff who have sent two directional letters to SLO County to date.

We also request by FOIA all communications whether phone memos, emails and letters relating to the LOWWP Coastal Development permit application.

Thank You,.
Al Barrow

Los Osos Legal Defense Fund
P.O Box 6931
Los Osos CA 93412 805 534-0800 Thank you for your support.

------ End of Forwarded Message

#13

al barrow

From: "Larry Raio" <lraio@calpoly.edu>
To: "Al Barrow" <a.barrow@charter.net>
Sent: Wednesday, August 26, 2009 10:47 PM
Attach: Re_ Permeability Calculations.eml
Subject: FW: Permeability Calculations Retraction

------ Forwarded Message
From: al barrow <a.barrow@charter.net>
Date: Wed, 5 Aug 2009 14:14:58 -0700
To: planning commission <planningcommission@co.slo.ca.us>, johnathan bishop <jbishop@coastal.ca.gov>, al barrow <a.barrow@charter.net>
Cc: Larry <lraio@calpoly.edu>, Chuck Cesena <ccesena@charter.net>
Subject: Re: Permeability Calculations Retraction

Dear Commissioners;
This email was done without the authors permission . My error. He has a comment that is appropriate attached for the record.
Thank You.
Al Barrow Coalition for Low Income Housing

----- Original Message -----

From: al barrow <mailto:a.barrow@charter.net>

To: johnathan bishop <mailto:jbishop@coastal.ca.gov> ; planning commission <mailto:planningcommission@co.slo.ca.us>

Cc: al barrow <mailto:a.barrow@charter.net> ; Chuck Cesena <mailto:ccesena@charter.net>

Sent: Monday, August 03, 2009 2:28 PM

Subject: Fw: Permeability Calculations

Dear Coastal and SLO Planning Commissioners and Staffs,

We have new information regarding the fate of the Broderson recharge leach fields and the septic leach fields. The calculations by this expert indicate that Level ! mitigation of this project will not be met (90afy seawater mitigation). There is no solid evidence that it can be met by the project. Therefore it is not a permitable project.

Mr. Raio is willing to testify if you notice him or myself by email. It is evident you need a SEIR to investigate flows and loads on the old gravity design by MWH that is still being used. Wastewater expert have said with conservation and the shallow slope of the collection pipe the "scouring speed will not be attained and a stinking "Black Sewer" will result. All violation of LCP Policies and Standards.

Thank You.
Al Barrow Coalition for Low Income Housing

----- Original Message -----
From: Larry Raio <mailto:lraio@calpoly.edu>

To: Al Barrow <mailto:a.barrow@charter.net>

106

Sent: Monday, August 03, 2009 10:14 AM

Subject: Permeability Calculations

Hi Al,

I ran some calculations with permeability rates to see how much water would leak through the aquitard at 3 different rates. As I mentioned to you, I believe the material would be slower than 1.00E-08 cm/sec, but I also ran it with 2 faster values, 1.00E-06 cm/sec, and 1.00E-06 cm/sec. Attached is the excel worksheet I used.

The results are:

1.00E-08 cm/sec: 0.12-inches of water would drip past it per year for 66 AF water over area of 10 sq miles

1.00E-07 cm/sec: 1.24-inches of water would drip past it per year for 662 AF water over area of 10 sq miles

1.00E-06 cm/sec: 12.4-inches of water would drip past it per year for 6622 AF water over area of 10 sq miles

As you can see from these results. It is critical to use accurate numbers in estimating recharge values through the aquitard. If the material is slower than 1.00E-08 cm/sec, which I believe it is, we would not get appreciable amounts of water recharge through this layer. I would like to know if core samples have been taken of the aquitard and if they have been tested for permeability rates.

I personally drilled a boring near the corner of 16th St. and Paso Robles to see what was holding up the water there, where during the Winter, the groundwater is at the surface. At 25-feet of depth, I encountered a 5-ft thick lense of clay, and once I punched through the clay, I encountered clean, dry sand below it. The clay appeared to be a pure clay with no appreciable amounts of sand in it; in my estimation, over 80% clay. It is the type of clay you could use for pottery. It was moist, very difficult to drill through, and came off the auger in solid ribbons. It is this type of material I would guess the aquitard that separates the upper and lower aquifer in Los Osos would be made of.

I have over 24-years experience in the Geotechnical Engineering profession, in the field and in the lab, classifying soils. I was the Laboratory Testing Manager for over 15-years for Earth Systems Consultants, Inc. I have run more permeability tests than I could count, not only on soils from this county, but on soils shipped to us from outside the area. I have seen soils with much less clay than I estimate in the material I mentioned above have that had rates slower than 1.00E-08 cm/sec. The test is fairly simple. A 2.5-in. diameter by 6-in tall sample in a brass tube is capped and sealed at both ends. There are porous stones and tubes at each end to allow water to pass into and out of the sample. Pressurized water is added to the bottom of the sample in small increments of added pressure and a vacuum is applied to the top of the sample until water comes through the sample. This can take days for water to even start coming through on slow permeable soils even with up to 100-psi water pressure being applied. After water comes through, vacuum is removed, the sample is allowed to equilibrate, and measurements of volumes of water collected over time are taken and results plugged into the equation for coefficient of permeability. What's amazing when observing the test, is how little water comes out of the sample; as little sometimes as a drop or two per hour even with 100-psi pressure being applied. Many times we collect water over a few days before we get enough for measurements and to determine when the rate becomes constant.

It is my understanding that the aquitard that separates the upper and lower aquifer in Los Osos is between 50-80-ft thick. As you can see from my calculations, depending on the values used, there is a huge difference on how much recharge can be expected through the aquitard. A layer as thin as 1/8-inch can slow water down to a drip, so it is the most restrictive part of the aquitard that needs to be used in recharge estimations. The only other way for water to get through the aquitard in for there to be a discontinuous area or "window" through it. The thicker

the layer, the less potential there is for a window. If there is a window, they need to be specifically identified and quantified before estimations of additional recharge can be made. From what I understand, identifying and quantifying these windows are very difficult, and to date, this has not been done for the Los Osos sewer project.

Larry Raio

------ End of Forwarded Message

#14

al barrow

From: <kwimer1@charter.net>
Cc: "Al Barrow" <a.barrow@charter.net>
Sent: Wednesday, August 26, 2009 8:21 PM
Subject: Re: Summary of discussion

---- Larry Raio <lraio@calpoly.edu> wrote:
> This is a summary of my discussion with Spencer Harris with Cleath-Harris
> Geologists, Inc. on August 21, 2009
>
> Most of my discussion with Spencer revolved around the recent technical
> memorandum presented to the ISJ Group (referred to the ISJ Report in this
> discussion) dated July 29, 2009. Specifically, the report with the subject
> ³Flow Model Conversion and Urban Area Yield Update² (apparently there are 4
> reports with the same date to the same group with different subjects; I am
> only familiar with this report). I also discussed parts of the Sea Water
> Intrusion Assessment Report (SWIAR) dated July 2005.
>
> It is important to note that this report represents one scenario that uses a
> steady-state condition to produce a sustainable pumping condition which is
> not to be confused with a safe yield condition (page 6, ISJ Report). The
> report says ³Safe yield is historically defined as the maximum draft on a
> basin that will not produce undesirable impacts. In Los Osos, the primary
> undesirable impact is sea water intrusion² (page 4). Again, the report
> proposes a sustainable as opposed to a safe yield condition, and the reason
> for this, is that is what the purveyors requested Cleath-Harris to study.
> They are defining a sustainable yield where the chlorides are not allowed
> to exceed 250 mg/l due to sea water intrusion (page 6). In a safe yield
> condition, chlorides would not be allowed to increase at all. What is being
> proposed here is to allow sea water intrusion to advance as long as the
> purveyors wells don¹t exceed 250 mg/l of chlorides. In fact the note at the
> end of page 8 states ²that 55 AFY of sea water intrusion continues to enter
> the basin, where it dilutes to below 250 mg/l chloride before reaching
> active production wells.² This is just another way of saying that sea water
> intrusion is OK as long as it doesn't ruin our wells and we can still sell
> our water. By definition, this is not a safe yield condition, nor does it
> appear that the purveyors are even interested in a safe yield condition.
>
> Throughout the report (ISJ Report) the term ³current conditions² is used and
> I asked for clarification. Current conditions in this report refers to the
> Draft LOCSD Water Management Plan (Cleath & Associates, 2005a) report.
> Spencer mentioned that in some instances newer data was included up to the
> year 2008, but it was not clear what data or the dates of the data used.
>
> The report (ISJ Report) involved simulating 50 years of historical data. The
> first 25 years at early basin development, an average value of 700 AFY was
> used. I questioned this valued because it seemed that the production would
> of been very low early on (less that 700 AFY) and then increased as the
> population increased over time. It seemed to me that if they had the actual
> data, that it should of been used in the SEWAT model to create a more
> accurate calibration of the model. His response was that he had neither the
> time or the budget to add this data. I also mentioned that the data for the
> first 25 years were not presented in the first table presented in the
> attachments labeled ³Los Osos Water Purveyor Production in acre-feet.² He
> said that this was privileged client information and that I could request it
> from them or that it may already be in the public record and could be found
> there. I feel it should be presented in the report as it was data that was
> used in the simulation, even though they only used the average.
>
> I also had questions on values used for (permeability) of the aquitard in

> the SWIAR 2005 report. In the section ³Regional Aquitard² on page 8, a value
> of. My common sense and experience told me that if the aquitard is a 50 to
> 80 feet thick layer of clay then very little to no measurable water is going
> to get through the lense. I have worked for about 30 years in the
> geotechnical engineering field. I am currently employed at Cal Poly, SLO as
> a Lecturer in the Architectural Engineering Department teaching Soil
> Mechanics Lab, also as a Lecturer in the Soils & Earth Sciences Department
> teaching a Introductory to Soil Sciences Lab. I worked for a local
> geotechnical engineering firm, Earth Systems, Inc., for 22 years where I
> worked as a staff engineer (I am not a registered engineer), Laboratory
> Manager, drill rig operator, field technician along with other functions. I
> have a B.S. In Natural Resources Management and a M.S. in Soil Science, both
> from Cal Poly, SLO. While working for Earth Systems, I personally drilled
> the borings and installed the monitoring wells for the Brown & Caldwell
> study. I have drilled hundreds of borings in Los Osos and installed
> piezometers to measure shallow ground water depths. I have performed
> hundreds of percolation tests throughout the county and many of them in Los
> Osos. I have designed over a hundred on-site sewage disposal systems under
> the supervision of a registered engineer throughout the county and many of
> them in Los Osos. Earth Systems was the only lab in the county that
> performed hydraulic conductivity on soil samples and I personally ran most
> of them while acting as Laboratory Manager, so I guess I would call myself
> an expert in this particular situation. It is my opinion that the regional
> aquitard has a hydraulic conductivity that is 100 to 1,00 times slower than
> the value used in this report.
>
> I would like to expand on why I think the hydraulic conductivity of the
> regional aquitard is slower than the value used in the report. I personally
> drilled a boring at the corner of 16th and Paso Robles Streets in Los Osos.
> The situation at this location was that during the wet season, after rains,
> ground water would rise to the surface and cause flooding of the street and
> would not disappear until days or weeks after the rain stopped and the
> ground water receded. Recently a pump has been installed here, and ground
> water is maintained to a lower level so flooding does not occur here any
> more. During the soil investigation, I encountered a nearly pure lense of
> clay at a depth from 25 to 30 feet below the ground surface. Located below
> the 5-foot thick clay lense, was dry, very fine to fine silty sand. The clay
> that came up the auger was difficult to drill through and came off the auger
> in long continuous ribbons. I remember thinking that this clay could be used
> for pottery as is, right out of the ground, it was that pure. Typically to
> test for fine sand that can neither be seen or felt between the fingers, a
> little is put between your teeth to see if it is gritty, and I found that
> there was very little fine sand in the clay. I encountered the same clay
> lense at 18th and Paso Robles Streets and about the same depth. When
> imagining what the composition of the regional aquitard that separates the
> upper and lower aquifers is, I always visualized this shallow aquitard that
> I experienced first hand in the 16th street boring.
>
> From what I understand, there have been no actual samples taken of the
> regional aquitard and the value of 0.002 ft/day is only an estimate as
> stated in the SWIAR 2005 report and in my conversation with Spencer Harris.
> As per the test method, values for hydraulic conductivity are typically
> expressed in unit of cm/s (centimeters per second). The value of is
> equivalent to 7 x 10-7 cm/s. I ran some calculations to estimate how much
> water would seep through the aquitard using the above stated value and some
> slower values. I don't know the actual area of the regional aquitard, but I
> used a value of 5 square miles which I believe to be in the ball park. Using
> 0.002 ft/day, I calculated that 2336 AFY of water would pass through the
> aquitard. Using 0.00002 ft/day (100 times slower, 23 AFY of water would pass
> through the aquitard.
>

> I asked Spencer how much water he felt was leaking through the annular space
> of the existing wells, which create a conduit for water to move from the
> upper aquifer into the lower aquifer. He estimated that about 200 AFY of
> water leaked through by this method. According to Table 14 of the SWIAR 2005
> report, 420 AFY recharges the lower aquifer from Creek Valley. The total of
> these two sources is 620 AFY, which also happens to be the yield
> distribution for a current conditions balanced basin for the lower aquifer
> as stated on page 6 of the ISJ Report. If these two sources of recharge are
> correct, then it would appear that there is not much leakage through the
> regional aquitard, similar to what my estimates show. I think the estimated
> value used in the model to be reduced to something more realistic and see
> how that changes the scenario.
>
> Items not discussed with him because my call was cut short, but I think are
> still of importance and concern are discussed next.
>
> Once the septic systems are taken offline, it appears that the Los Osos
> creek valley is going to dry up creating similar conditions to what existed
> before development. None the less, large areas of wetlands will be
> destroyed.
>
> On page 11 of the ISJ Report under Discussion, I don't understand the number
> given in paragraph 2 where it states 'that exporting all of the current
> septic flow from the prohibition zone (1,157 AFY before conservation) will
> decrease basin yield by approximately 500 AFY. Is this saying that there
> will be 57% conservation of the 1157 AFY?
>
>
> I have also attached a word document of this.
>
> Larry Raio
>

#15

al barrow

From: "Larry Raio" <lraio@calpoly.edu>
To: "Al Barrow" <a.barrow@charter.net>
Sent: Wednesday, August 26, 2009 10:50 PM
Subject: FW: Los Osos WWTP Cost Range

------ Forwarded Message
From: al barrow <a.barrow@charter.net>
Date: Tue, 25 Aug 2009 19:25:05 -0700
To: Larry <lraio@calpoly.edu>
Cc: al barrow <a.barrow@charter.net>
Subject: Fw: Los Osos WWTP Cost Range

----- Original Message -----
From: Bill Cagle <mailto:bcagle@orenco.com>
To: 'al barrow' <mailto:a.barrow@charter.net>
Cc: 'Mike Saunders' <mailto:msaunders@orenco.com>
Sent: Tuesday, August 25, 2009 4:13 PM
Subject: Los Osos WWTP Cost Range

Sorry, this version should have the tables included.

Al,
Below is Mike's response to your question regarding cost. Can you please have your attorney explain how this statement might be used? This will help us be better prepared should we be called to question. Thanks

I have worked with Orenco Systems, Inc for 4 1/2 year. Prior to that, I was the County Utility Engineer for Charlotte County Utilities for nine years. During my time at Charlotte County, I experienced a failed conventional sewer approach (40,000 connections), executed the extension of STEP wastewater collection to 5,000 properties. The use of STEP systems in Charlotte County provided significant capital cost savings when compared to the proposed gravity system.

Charlotte County Utilities was and is the oldest and largest STEP systems in the world. It is operated in conjunction with a conventional gravity sewer system that serves more than 20,000 homes. Based on my experience and observations, I offer the following discussion relative to the perceived cost of a STEP system in Los Osos.

The "Viable Project Alternatives Fine Screening, dated August 2007. In the reports introduction it is stated that the report provided "information on what the community can expect through the County implemented solution, in terms of costs, benefits and overall approach". Presumably, this report was intended to be one of the primary documents that the residents of Los Osos will utilize in deciding their vote with regards to the County's Proposition 218.

When the public voted on the County's Proposition 218, it was our understanding that they were approving a not-to-exceed expenditure and not a project. Additionally, it is our observation that the residents of Los Osos had an expectation that the most economical approach would become the constructed project.

Prior to the release of the Fine Screening, Orenco Systems had already expressed concern regarding the omission of input that we provided. This omission of key data, while not necessarily important to

the vote, was critically important towards defining the most cost effective STEP project that was ultimately analyzed in the Fine Screening Study. Despite Orenco's vast experience with STEP projects, the consultant and the County unilaterally defined the scope of a STEP project and ultimately, the project that they defined.

Subsequent to the release of the Fine Screening Study, in a public presentation, there was statement from the County Consultants that inferred that capital costs for STEP and gravity sewer would be comparable, while the coordination of STEP installation will be more difficult.

In our opinion, the fine screening did not provide a comparison of STEP and gravity costs that adequately supported the statements made on public record.

The following table is included in the Appendix "C" of the Fine Screening Analysis. This table explains the various Categories of Estimates with regards to the level of project definition and expected accuracy.

Table 1.1 Category of Cost Estimates[1]
Los Osos Wastewater Project Development
San Luis Obispo County

	Primary Characteristic	Secondary Characteristic			
ESTIMATE CLASS	LEVEL OF PROJECT DEFINITION Expressed as % of complete definition	END USAGE	METHODOLOGY Typical estimating method	EXPECTED ACCURACY RANGE Typical variation in low and high ranges [a]	PREPERATION EFFORT Typical degree of effort relative to least cost index of 1 [b]
Class 5	0% to 2%	Concept Screening	Capacity Factored, Parametric Models, Judgment, or Analogy	L: -20% to -50% H: +30% - +100%	1
Class 4[2]	1% to 15%	Concept Screening or Feasibility	Capacity Factored, Equipment Factored, Parametric Models or Analogy	L: - 15% to -30% H: +20% - +50%	2 to 4
Class 3	10% to 40%	Budget, Authorization, or Control	Semi-Detailed Unit Costs with Assembly Level Line Items	L: - 10% to -20% H: +10% - +30%	3 to 10
Class 2	30% to 70%	Control or Bid/ Tender	Detailed Unit Cost with Forced Detailed Take-Off	L: - 5% to -15% H: +5% - +20%	4 to 20
Class 1	50% to 100%	Check Estimate or Bid/Tender	Detailed Unit Cost with Detailed Take-Off	L: - 3% to -10% H: +3% - +15%	5 to 100

Notes:
1. Table 1.1 comes from the AACE International Recommended Practices and Standards, No. 18R-97.
2. Most of the estimates in the Fine Screening Report are at this level.
   a. The state of process technology and availability of applicable reference cost data affect the range markedly. The +/- value represents typical percentage variation of actual costs from the cost estimate after application of contingency (typically at a 50% level of confidence) for a give scope.
   b. If the range index value of "1" represents 0.005% of project costs, then an index value of 100 represents 0.5%. Estimate preparation effort is highly dependent upon the size of the project and the quality of estimating data and tools.

It is critical that the public understand the significance of this table. The STEP estimates from Carollo are stated to be Class 4 while the gravity sewer estimates are stated to be Class 1. The estimates for STEP are stated to be 1% to 15% of the total level of project definition required. Furthermore the accuracy of the estimate can be off by as much as 30% on the low side and 50% on the high side.

Based on the level of estimate provided, did a Class 1 estimate support the statement made by the consultant with regard to cost comparison? Furthermore, how could we conclusively state that STEP costs were actually comparable to gravity sewer? The public presentation contained no explanation regarding the potential variance in cost estimates.

The following table, also from Appendix "C" in the Fine Screening Study, further penalizes the STEP estimate for not being as accurate as the gravity sewer estimate.

Table 1.4 Basis for Estimating Project Costs Los Osos Wastewater Project Development San Luis Obispo County	
Item	Estimated Cost[1]
Obtain Base Construction Cost from Bid Tabs, previous Engineers Estimates, analogous facility costs, parametric models and/or Carollo's unit price catalog. Adjust this cost to April 2007 cost for San Luis Obispo, California. Cost includes: • Adjustment to "mid range" of bids for each item • Mobilization/Demobilization • Electrical • Site Work/Yard Piping • Sales Tax on materials only (8%) • Contractor overhead and profit (15%)	"A"
Add 30% of Subtotal Cost to Class 4 estimates and 10% to Class 1 estimates as Construction Cost Contingency.	+ 10% to 30% of "A"
Subtotal Estimated Construction Cost	"B"
Add 8% sales tax on materials and 15% for contractor overhead and profit	+ 15% to 22% of "B"
Subtotal Estimated Construction Cost	"C"
Escalate to June 2011 - 5% per year	+ 24.5% of "C"
Subtotal Escalated Estimated Construction Cost	"D"
Project Cost - will provide line items [2]	+"E"
Total Estimated Project Cost	"F"

Notes:
1. Based on June 2011 costs for San Luis Obispo, California (Estimated ENRCCI projection for the 20-Cities Average is 7879 for February 2007 and location factor adjustment is 1.054.).
2. Includes design engineering contingencies, construction management, administrative, and legal costs.

Typically, contingency is added to projects in case unforeseen costs become applicable during construction. In the context of this analysis, Carollo has added 30% contingency to STEP because there has been less detail in the estimate. Comparatively, only 10% contingency is added to gravity as a reward for a more detailed estimate. Accordingly $11,000,000 (low estimate) to $15,000,000 (high estimate) is being added to STEP that isn't being added to gravity. In practicality, due to the complexity of construction, there is much more inherent risk in gravity sewer construction than STEP construction. Change orders, for unforeseen site condition are common in virtually all gravity sewer projects of this nature despite the level of detail put forth during design. Regardless of the level of estimate, it is highly questionable to assert that contingency should be higher for STEP. When a range of cost is presented, one has to understand that a large amount of subjective costs have been allocated to the cost of STEP, thereby inflating the possible range of cost.

Furthermore, the following table (Table 3.18), again from the fine screening analysis, shows that 15% overhead and 8% taxes are added to STEP while they are omitted from gravity. Since the gravity sewer estimate is more accurate, they have stated that the gravity sewer estimate includes these costs while presumably, they can not effectively say the same about their STEP estimate. This additional cost is added before contingency is added, so the impact of the overhead and taxes is compounded by the additional contingency.

Table 3.18 Range of Probable Costs for STEP/STEG Collection System
Los Osos Wastewater Project Development
San Luis Obispo County

Item[2]	Range of Probable Costs Low ($M)[1]	High ($M)[1]	Notes on Development of Range
Mobilization/Demobilization /General Conditions	2.6	3.2	Based on 5% of Construction Cost Subtotal.
COMMON FACILITIES			
Force Mains and Laterals in Right-of-Way	$1.7	$5.2	Low estimate based on Los Osos Wastewater Management Plan Update (Ripley 2006) and installation costs from Tidwell. High estimate includes 30% contingency due to conceptual design level.
Odor Control	0.1	0.3	Low and High estimates based on 100 and 300 air release valves respectively at $500 each.
Road Restoration	1.3	2.6	Low and High estimates based on 25% and 50% of the gravity system requirements, respectively, due to estimated reduction in pavement disturbance.
Land and Easement Acquisition	Assumed No Additional Cost[3]	Assumed No Additional Cost[3]	
ON LOT FACILITIES			
Project Facilities	23.6	25.8	Based on on-lot options and cost development information presented above. High estimate includes 10% contingency similar to gravity system.
Homeowner Facilities	9.1	9.7	Based on on-lot options and cost development information presented above. High estimate includes 10% contingency similar to gravity system.
Electrical Connection	9.1	14.3	Low and High estimates based on $1,900 and $3,000 per connection as presented in Table 3.15 for 4769 Prohibition Zone lots.
Subtotal	$54.4	$68.3	
Overhead and Profit (15%)	$8.1	$10.2	
Subtotal	$62.3	$78.2	
Sales Tax (8%)[4]	$2.5	$3.1	
TOTAL CONSTRUCTION COST WITH BASE ELECTRICAL CONNECTION	$65.0	$81.4	
Separate Electrical Service Premium	$14.5	$24.1	
TOTAL CONSTRUCTION WITH SEPARATE ELECTRICAL SERVICE PREMIUM	$79.5	$105.5	

Notes:
(1) All costs in April 2007 dollars, based on an ENR of 7679.
(2) Prohibition Zone lots only - 4769 connections.
(3) Land and easement acquisition assumed to be sunk cost as part of the previous Tri-W project.
(4) Sales Tax included on materials only.

Also in table 3.18, the low range cost shows the separate electrical premium. The electrical premium is contingent upon a hypothetical requirement from the State Water Board that would require a public electrical supply rather than a simple service through the existing homes electrical panel. In execution, virtually all existing STEP systems installed in this Country utilize power service from the home. While this could be included in the high end cost, we believe that the low end cost should be reflective of the methodology that is actually normally used to power a STEP pump package. The $14,500,000 in additional cost again was added before contingeny, so this arbitrary cost addition was compounded by the additional contingency that was added.

What did all of this mean to the voter? We believe there are two very important points to note. They are as follows:

1) If we use Table 1.1 to restate the potential cost range of the project, the numbers are very startling. The actual range for STEP, without compromising the integrity of this Study could actually be $45.5 million to $121.5 million while the actual range of gravity could be $73.8 million to $103.5 million. Accordingly, if these technologies were bid head to head, STEP could come in at $45.5 million while gravity could come in at $103.5 million and this report wouldn't be wrong. STEP in fact, by this report, could be half the cost of gravity. This potential variance in cost was never explained to the voter.

2) If the same level of estimate had occurred, one would presume that contingency, overhead and taxes would be treated comparably for both technologies. Orenco had provided bid tabs to the County, with overhead and profit included that support a cost that is lower than the stated low cost without overhead and sales tax. Also, if the low estimate actually utilized the probable low cost of electrical supply the low end cost would be significantly different. Without Sales Tax, Overhead, Electrical Premium and with 10% contingency, our calculations show that the low estimate would be in the range of $44 million while the high estimate would be in the range of $75 million.

We do not believe that this Fine Screening Analysis adequately provided proper "information on what the community can expect through the County implemented solution, in terms of costs, benefits and overall approach". The report did not compare STEP costs and gravity costs to the degree necessary to establish true comparative costs nor does it evaluate STEP on a level playing field with gravity sewer. We do not believe that an analysis that utilized different levels of estimating is adequate to support any determination that capital costs for STEP and gravity sewer are comparable. Furthermore, it is extremely misleading to apportion subjective costs such as sales tax, overhead, electrical premium costs and contingency in a manner that is not equitable between comparative technologies.

The consultant expended large resources in modeling treatment processes and in evaluating the cost of

gravity sewer. We have to question why that the same level of resources was not applied to the STEP cost estimates so that a Class 1 estimate of STEP is available for comparison to the gravity sewer costs.

Our opinions were validated by an independent review that was done by the National Water Research Institute (NWRI). Their findings included the following:

- "Alternatives should be presented with sufficient detail in terms of description and estimated costs so that rational comparisons can be made."

- "Cost estimates should be stated clearly and compared on an equivalent basis with the same degree of variability and specificity. Refined and updated cost estimates are needed for each alternative so that decision makers and stakeholders can make informed judgments."

It does not appear that either of these NWRI recommendations was adequately addressed.

Beyond the estimates, we can take a more practical approach to discussing the provision of a STEP system in Los Osos. Orenco Systems, in the early stages of project development, recommended to the Los Osos Community Services District (LOCSD) that a Design Build approach be utilized for the procurement of a wastewater system for Los Osos. We told them that a Design Build approach, if properly executed, could deliver the ingenuity and expertise necessary to provide a low cost sewer option for Los Osos. At another meeting, we actually introduced the community to our potential Design Build team members that were ready to respond if a Design Build Request for Proposal was issued.

When the Design Build approach was finally recommended by County Staff, we believed that the process would move forward as promised. Unfortunately, during execution of the process, our team was removed. We were not removed because of our teams competency or qualifications (we may have been the most highly qualified team involved), but by the recommendation of County Staff, we were removed because we recommended STEP wastewater collection as a viable method for reducing capital cost. In fact, during our presentation to County Staff, we stated the cost will be less and we will guarantee a not-to-exceed cost. Unfortunately, we were denied the opportunity to submit a proposal and therefore, we were denied the opportunity to make the ultimate not-to-exceed cost public.

At this time, the obvious question remains. Could STEP have delivered a low-end cost in the $40 million dollar range? The Design Build team intended to work in partnership with the County, starting with the County defined STEP project, and then offering value engineering alternative that were intended to reduce the project cost. Value engineering alternatives included the following:

- The use of all or some of the existing septic tanks.

- The use of STEG (Septic Tank Effluent Gravity) systems when hydraulic conditional allowed.

- The use of alternative STEP pump packages that are available from Orenco.
- The use of decentralized treatment at sites that have a need for irrigation water.
- The use of shared interceptor tanks (2 and possibly 4 homes per tank).
- The use of community tanks in areas of high density.
- The use of remote system monitoring.
- The possibility of including an O&M service at a fixed cost.
- The possibility of utilizing an extended period for connecting customers that prioritized the "hot-spots" first.

These options were never explored by the consultant and were never conveyed to the public as alternatives for possible adjustments in capital cost.

Had the design build process moved forward and had the County partnered with our Design Build team to achieve the best value for the residents of Los Osos, a final cost in the $40 million dollar range was not only possible, but probable.

Respectfully,

Mike Saunders
Orenco Systems, Inc.

Mike Saunders
Orenco Systems, Inc.
www.orenco.com <http://www.orenco.com>

Phone: (866) 914-9454
Cell: (941) 276-8586

Respectfully,

Bill Cagle
National Accounts
Orenco Systems Inc.
www.orenco.com
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(P) 800.718.4046 direct
(F) 541.459.2884

------ End of Forwarded Message

#16

al barrow

From: "al barrow" <a.barrow@charter.net>
To: "jesse hill" <jlbhill@aol.com>
Cc: "Piper Reilly" <getgreenlo@gmail.com>; "al barrow" <a.barrow@charter.net>
Sent: Monday, August 24, 2009 4:13 AM
Attach: Policy 8.doc
Subject: LCP Policy 8

Dear Mr. Jesse Hill;

Here are a few LCP Policies that seem germane to our appeal of the CDP.
Deadline Thursday 5pm at SLO Planning desk.Each section ahs it's own policies so a few may overlap into combining policy. Only numbered policies are acceptable.
These are the updates from August 2006 but are not final as Los Osos was the area omitted from the General Plan Update.

Overall STEP/STEG is the most protective of coastal resources as it disturb less with directional drilling installation method of the collection system in the right of way. That eliminates huge dirt removal of deep trenching and the commensurate water losses from dewatering.

Also local labor will play a greater roll and aid in keeping the tax dollars in the community. A reduction in losses of revenue is a socio economic impact reduced by up to 50%. Michael Saunders P.E. is providing the STEP/STEG lowest cost estimate. He is Orenco (major STEP/STEG designers) engineer and past Water/Wastewater engineer for Charlotte County Florida where he supervised bidding, maintenance and installation of 25,000 gravity connections and 7,000 STEP/STEG connections.

The list of impact reduction by STEP/STEG and pond treatment is almost a universal reduction in cost and resource savings that is too great to eliminate from the Design/Build competition and evaluation. STEP/STEG and ponds treatment elimanate sludge almost entirely for 30 years and longer. All the coastal policiesa are more heartily adhered to with these viable alternatives. Why were they taken off of the table when they were described in the SOQ,RFQ and the 218 Assessment? We hold that is inappropriate and that SLO County should restore tham.

Regarding CEQA: Jones and Stokes stated that what where and how are essential for mitigation. The SLO County has been vague and evasive as to how and when it will occur, These mitigation plans are supposed to be reviewed in the CEQA process but were not. We agree with Santa Lucia Chapter of the Sierra Club an SEIR is required if they want to pursue this project. LOCAC and the LOCSD among others made comments on the inadequacies of fulfilling CEQA guidelines. Surfrider and the Los Osos Sustainability Group found it woefully inadequate as did other environmental professionals that meet these bars in their daily work, C.A.S.E. as well. (Citizens for Affordable and Safe Environment). By the way I added some LCP pipeline language that is specific to oil pipeline that may be inappropriate.

The lack of details on how impacts are to be mitigated are disturbing. I have professional friends in private industry that could not get a permit from the county for this kind of double standard.

In sum the compliance with the legal bar for CEQA is in question as in the compliance of the SLO County proposed project CDP related to the LCP. I hope I have not been to vague.

Thank You,.
Al Barrow

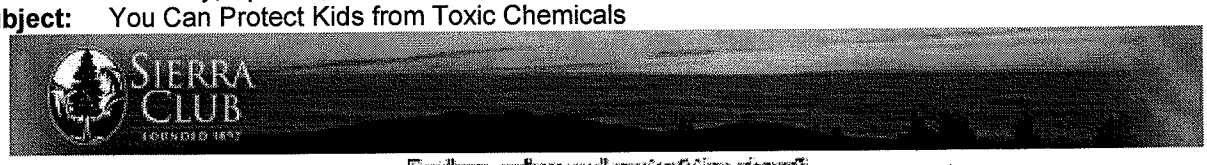
Los Osos Legal Defense Fund
P.O Box 6931
Los Osos CA 93412 805 534-0800

Until Tuesday 9am respectfully

#17a

al barrow

From: "Greg Haegele, Sierra Club" <membership.services@sierraclub.org>
To: <a.barrow@charter.net>
Sent: Saturday, April 04, 2009 7:00 AM
Subject: You Can Protect Kids from Toxic Chemicals



Dear Al,

Did you know that babies are being born with more than 300 industrial chemicals in their bodies, many associated with diseases from childhood cancer to birth defects, infertility and learning deficits?

Protect Kids from Toxic Chemicals!

Urge Senator Barbara Boxer to pass the Kids-Safe Chemicals Act!

America's toxic chemical safety law fails to protect the most vulnerable in society, kids. It assumes that chemicals are safe and relies on the government to identify dangerous chemicals among the 80,000 on the market. That hasn't worked. Instead, the burden should be on chemical manufacturers to **prove that chemicals are safe for infants and children before they enter the marketplace**.

California Senator Barbara Boxer has long supported the Kids-Safe Chemicals Act, which will make many important changes to chemical safety law to protect children. **Urge her to keep up the good work and pass the bill.**

As Chair of the Senate's Environment Committee, Senator Boxer is in a key position to pass legislation to protect kids' health from toxic chemicals in our food, air and water. The Kids-Safe Chemical Act would put the burden on chemical manufacturers to test chemicals' health effects thoroughly before marketing them, guarantee the public's right to know about health and safety data, and give the EPA clear authority to ban or restrict chemicals.

Senator Boxer has long been a leader in advocating protection of childrens' health. Urge her to pass the Kids-Safe Chemical Act ASAP.

Thanks for taking action to protect our children's future.

Sincerely,

Greg Haegele
Director of Conservation

If you do not wish to receive future emails like this, click here to be removed from this type of email contact.

Update My Profile | Manage My Email Preferences | Update My Interests

Sierra Club
85 Second St.
San Francisco, CA 94105

176

al barrow

From: "Lars Tomanek" <ltomanek@calpoly.edu>
To: "al barrow" <a.barrow@charter.net>
Sent: Thursday, January 29, 2009 3:56 PM
Attach: Los Osos Environmental Impact Statement 2009.pdf
Subject: Re: DEIR

Here it is: I sent it to Mark.

Thanks for sending me his e-mail. Please respect this information as confidential given the preliminary nature of some of our results.

Regards,

Lars

On Jan 28, 2009, at 12:12 PM, al barrow wrote:

> Hi Lars;
>
> Here is the contact to submit by this Friday to SLO County.
>
> Mark Hutchinson
>
> Environmental Programs Manager
>
> San Luis Obispo County Department of Public Works
>
> County Government Center Room 207
>
> San Luis Obispo, CA 93408
>
> mhutchinson@co.slo.ca.us
>
> The food chain in the saltwater marshes are all affected by nonylphenol and other EDCs and a list of emerging contaminants. Breast feeders, developing babies, adololecents of all species are damaged. The Steelhead population has been impacted. The USEPA clean water EDSP in vitro testing program is required to class as to EDC 86,000 common chemicals of comcern.
> Here is the DEIR http://www.lowwp-eir.net/lowwpeir/ site notice on PD, prokect description, all four project propose recharging our aquifer at Broderson...in my view that is a fatal flaw.
> Appendix B describes the Broderson site...the efluent will ride the lamella and clay lenses to the seeps aroud and under the MB Estuary and will pollute the Bay with these chemicals. MB is a special status Estuary as well as a National Estuary. These impacts are unacceptable and their is no mitigation, While there are other sources that need to be controlled that does not justify destroying habitat and the species that depend on it.
> Thank You.
> Al Barrow Coalition for Low Income Housing Citizens for Affordable and Safe Environment
> PS Please send a link to your webpage.

****
Lars Tomanek, Ph.D.
Assistant Professor

Environmental Proteomics Laboratory
Center for Coastal Marine Sciences
California Polytechnic State University
San Luis Obispo, CA 93407-0401
USA

Webpage: http://www.calpoly.edu/~bio/EPL/index.html
ltomanek@calpoly.edu
Phone: 805 756 2437
E-mail: ltomanek@calpoly.edu
****

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****

STATE OF CALIFORNIA – NATURAL RESOURCES AGENCY ARNOLD SCHWARZENEGGER, Governor

CALIFORNIA COASTAL COMMISSION

CENTRAL COAST DISTRICT OFFICE
725 FRONT STREET, SUITE 300
SANTA CRUZ, CA 95060
PHONE: (831) 427-4863
FAX: (831) 427-4877

March 25, 2009

Paavo Ogren, Director
San Luis Obispo County Public Works Department
County Government Center, Room 207
San Luis Obispo, CA 93408

Subject: **Proposed Los Osos Wastewater Project**

Dear Mr. Ogren:

We received the County's request for our comments on the proposed Los Osos Wastewater project (project referral number DRC2008-00103). We also previously received a copy of the Draft Environmental Impact Report (DEIR) for the project. Please accept the following comments on both the project and the DEIR. We regret we could not complete these comments sooner, however, staffing and budget cuts have significantly impaired our ability to carry out our responsibilities under the law in a timely manner.

Summary

As we have previously indicated to the County on numerous occasions, we are supportive of a project designed to alleviate the current significant wastewater problems in the Los Osos area and ameliorate the degradation of marine resources in the Morro Bay estuary resulting from failing septic systems. It is clear to us that the community is in dire need of improved wastewater collection, treatment, and disposal facilities, and that these improvements are necessary if significant coastal resources (including the Los Osos Groundwater Basin, the Morro Bay estuary, and related resources) are to be adequately protected and restored. It is also clear to us that such a major public works project understandably raises a wide spectrum of Coastal Act and Local Coastal Program (LCP) issues and concerns. Similarly, we recognize that any proposed waste water treatment system, especially the siting of treatment works facilities, will generate local opposition. Notwithstanding local or neighborhood opposition, it is imperative that a system be located, designed and constructed in a manner that is consistent, to the maximum extent required by law, with applicable land use and resource conservation policies. Based on the information received, we have a number of recommendations we think are necessary and appropriate to best achieve Coastal Act and LCP conformity. We also have some questions that may lead to additional recommended modifications depending on the answers to them.

In summary, with certain modifications (including those detailed below), we support a build alternative that avoids adverse coastal resource impacts to the maximum degree feasible, including full mitigation for any unavoidable impacts. From the materials we have reviewed, it appears that a project is both feasible and consistent with law, including a project that can build upon the various alternatives evaluated by the County to date. However, because there are several critical outstanding questions that affect the precise siting and design of such a build

project, we cannot provide a specific recommendation relative to the four primary alternatives evaluated in the DEIR, including the project the County has identified as its preferred alternative (alternative 4 from the DEIR). At the same time, it is our firm opinion that an approvable project differs from all these projects as currently envisioned, and in fact is more likely to be a permutation of the best components of these alternatives and other concepts identified to date.

Toward that end, we have some specific recommendations and questions that we believe are necessary to achieve a build project that is consistent with the Coastal Act and LCP, and that we hope will assist the County as it moves toward that goal.

In terms of the avoidance of adverse coastal resource impacts, our primary recommendation is that an approvable build project, regardless of treatment plant location and collection method, must be modified to provide for tertiary treatment so that any spray field area used for the project that is in or affects agricultural land or uses can continue to be used for agricultural purposes and production (with or without the spraying). Such a modification also avoids potential adverse effluent disposal impacts on habitats and groundwater (including in relation to the leach fields at the Broderson site). It also addresses other necessary and appropriate mitigation measures for adverse project impacts because the tertiary treated wastewater will then be available and can then be used for other beneficial uses (i.e., groundwater augmentation, irrigation, habitat enhancement, etc.). In our opinion, and based on evolving information and circumstances, it is clear to us that a project that incorporates tertiary treatment is necessary to achieve LCP and Coastal Act consistency.

Unfortunately, the materials we have seen do not thoroughly evaluate the ramifications of going to tertiary treatment, and this affects our ability to provide much further project specific recommendations. By that we mean that although the physical plant requirements for tertiary treatment are identified (and generally appear to be fairly minor differences in scope and scale), as are the costs of doing so, the implications and opportunities that such a modification engenders appear not to have been identified or evaluated. It seems clear that if the project is a tertiary project, many of the effluent disposal options will be completely different from those that have been evaluated, and could significantly change the scope of the project, including the availability of effluent for a range of beneficial uses (including, but not limited to, injection wells, urban/agricultural exchange or "purple pipe" programs, etc.). At a minimum, a tertiary project will have significantly different effluent disposal needs and opportunities, including significantly different space requirements. I n this regard, it is incumbent on the County to thoroughly evaluate and explain the various options and implications so that fully informed and best land use decisions can be made.

In addition to this primary means of avoiding adverse coastal resource impacts, the project must be sized and directed to existing developed areas in order to avoid inducement of inappropriate growth. This means that physical capacity, system sizing needs, and service area must be directly connected and correlated to the existing developed area and the limited infill/redevelopment potential within that area. Except for existing legal lots of record where some type of development may need to be approved to avoid a takings of private property, all existing habitat

areas (i.e., wetlands, streams, terrestrial habitat, ESHA, etc.) and agricultural land in and around the project area must be excluded from potential service to obviate growth that is inconsistent with Coastal Act and LCP. Furthermore, subsequent LCP amendments that strengthen the correlation of the urban services line to the service boundary will be necessary.

The project must be sited and designed in a manner that respects significant public visual resources and public recreational opportunities. It must also incorporate or take into consideration all applicable terms and conditions associated with the previous wastewater project permitted by the Commission in 2004 (per CDP A-3-SLO-03-113, since expired). As you know, considerable Commission and County effort was invested in developing the elements and parameters of that 2004 approval, and many of the same issues are raised now and warrant similar treatment. Thus, we recommend that the terms and conditions of CDP A-3-SLO-03-113 be used as a starting point for consideration of development terms for the current project.

Issues

Agriculture

One of the major concerns with the proposed project on the County's "preferred" site is that it would take some 192 acres of agricultural land, most of which is prime, out of agricultural production. Approximately 17 acres would be needed for the physical plant and related facilities. However, a much larger area, approximately 175-acres, would be converted for spray fields and leach lines. Because the effluent will only receive secondary treatment, that land would not be used or made available for agriculture (or almost anything else). Indeed, any materials removed from the disposal area (e.g., grass, cover crop) would have to be disposed of at a landfill.

LCP Agriculture Policy 1 requires that agricultural land be maintained in or available for agricultural production and strictly limits the conversion of agricultural lands to non-agricultural uses. Where such uses are allowed on agricultural land, it must be demonstrated that no alternative building site exists on or offsite and the least amount of land possible is converted. Such permitted uses cannot conflict with surrounding agricultural land and uses (Policy 1 and CZLUO Section 23.08.288(d)). It is clear that some conversion is required for a physical plant located outside of town (some 17 acres). However, it is not clear that the complete conversion proposed (i.e., where such land would be completely converted because the land cannot be used for anything other than secondary treated wastewater disposal) for the effluent spray fields and related area, some 175 acres, is similarly required. If the wastewater were treated to tertiary levels, this land could continue to be used for agricultural purposes. That is true whether the tertiary treated effluent is disposed of in the manner proposed, or whether it is instead directed to some form of beneficial reuse (e.g., injection wells to offset loss of septic input and/or to stem seawater intrusion, agricultural irrigation ("purple pipes") that allows certain groundwater pumping to be reduced). With tertiary treatment, some combination of beneficial uses would result in a reduction of land area required for effluent disposal. In our opinion, the LCP requires that the project be modified in this respect if it is feasible to do so.

In addition, with a tertiary treatment project, it may be that the co-location benefits that accrue to

a project outside of town on agricultural land are no longer applicable. In other words, a tertiary project may make better sense to be sited closer to or in town at the Tri-W site (and potentially off of agricultural lands altogether) to the extent it is re-envisioned as a hub for distributing reclaimed wastewater where such distribution is closer and/or in town (e.g., through injection wells, irrigation connections). As previously mentioned, the effluent disposal needs and potential alternative uses of tertiary treated effluent need to be thoroughly evaluated in order to make informed judgments on this point. However, it appears clear that such a basic change in presumption could lead to other treatment plant locations becoming more attractive, perhaps even some that were excluded from consideration in the DEIR through prior "screening" efforts, like locations near suitable injection well locations or appropriate irrigation hubs, etc. To the extent such options make sense with a tertiary project, and can avoid adverse agricultural impacts from plant siting, we encourage the County to pursue evaluation of such options as it reconsiders project parameters with a tertiary project.

In terms of mitigation for unavoidable agricultural impacts, the project appears to be premised on a 1:1 mitigation ratio for direct impacts, and a 0.5:1 mitigation ratio for indirect impacts. However, several aspects of this mitigation framework are unclear, including to what degree an impact is deemed "indirect", and thus, per the DEIR, considered of lesser magnitude. Because indirect impacts will decrease agricultural sustainability and productivity, and could even lead at a certain point to direct conversion depending on the nature and severity of the impacts, the most conservative LCP approach is to consider indirect impacts to be direct impacts, and we believe that that is the approach that should be used here.

In addition, since any unavoidable agricultural land impacts will be to existing agricultural lands protected as such by the LCP, all mitigation should be premised on appropriately replacing those agricultural lands (e.g., buying urban property with appropriate soils and converting back to agricultural production) and/or protecting specific agricultural properties that are seriously threatened by potential urban conversion (e.g., due to urban-agricultural interface conflicts, legal lot issues) or that are critical for ensuring a stable urban-rural boundary (e.g., due to strategic location). Further, given the inherent difficulty in ensuring that these agricultural mitigation measures will be successful over the long term, and to provide some insulation against a certain degree of potential failure in that respect, a rote reliance on a 1:1 mitigation framework is inappropriate in this case. Rather, any project approval should be based on a greater than 1:1 mitigation ratio that is itself derived from and supported by evidence showing that long term agricultural productivity will be protected on a minimum acre for acre basis that takes into account the need for "insurance buffer" acreage.

With respect to the ultimate amount of agricultural land impacted and necessary replacement/protection acreage, the acreage affected by the project in this respect is unclear based on the materials we have reviewed to date. The acreages identified as directly impacted are different in different locations (including between the DEIR and the project referral), and the indirect acreage impacts are unclear and need to be more clearly identified. In addition, a modification to tertiary treatment will substantially alter the agricultural mitigation premise,

including how much land is necessary for effluent disposal. Tertiary treatment also alters the mitigation premise in terms of associated project costs because, among other factors, agricultural mitigation costs would go down, but project costs would presumably go up (although some could be recouped through beneficial reuse of tertiary treated water). In any case, we would be happy to work with the County on the particulars of an agricultural mitigation program based on the evaluation we were provided as well as issues relating to tertiary treatment options relating to some form of continued agricultural production on affected lands.

Ultimately, the selected agricultural mitigation measures must be consistent with and further LCP goals of protecting overall public health and welfare, environmental quality, and long-term agricultural sustainability. Accordingly, any sites "protected" under the mitigation program must effectively guard against further losses and conversions, whether by urban sprawl or from other threats. The program must provide enforceable mechanisms to ensure that this is the case (e.g., affirmative agricultural easements, third-party easement holders). The program must also ensure that mitigation site management measures are mindful and protective of adjoining natural habitats and recreational resources. The program should also provide for evaluation of agricultural practices on affected lands to ensure that they are appropriate and capable of restoring and promoting healthy soils (e.g., minimize soil erosion, minimize air and water quality impacts, organic farming), ensuring sustainability over time, and that they foster skills, appreciation of and understanding needed to promote wise stewardship on the part of growers, the community and the general public. Obviously, such a program requires much more than an 'acreage for acreage' exercise, and instead calls for a more holistic and inclusive approach designed to take into consideration the range of factors and variables that will determine and ensure long term agricultural protection and sustainability. This is an area of land use undergoing close scrutiny, exciting change and innovation that is vital to our communities' future food security. We have some experience with recent agricultural mitigation programs of this type, and would be happy to provide additional input on this subject.

Urban-Rural Boundary, Growth Inducement

The proposed project represents a major public infrastructure works with the potential to significantly destabilize the urban-rural interface in this coastal region by inducing growth inconsistent with Coastal Act and LCP policies (e.g., protection of natural habitat areas, agricultural lands and uses, public visual resources). The LCP limits the capacity of public works facilities to avoid inducing growth beyond what can appropriately be accommodated consistent with coastal resources protection policies. Public Works Policy 2 together with LCP Coastal Zone Land Use Ordinance (CZLUO) Sections 23.04.430 and 23.04.032 specifically prohibit the extension of services outside the LCP's Urban Service Line (USL). Accordingly, it is critical that the project be sized, directed to, and restricted to service of existing developed areas only, and that it not be allowed to induce inappropriate development – whether in or outside the USL. This means that physical capacity and system sizing, as well as legally enforceable restrictions, must be included in the project to ensure that only existing developed areas, consistent with LCP infill/redevelopment policies, will be served by the project.

We understand that the proposed project service area is co-terminus to the septic discharge prohibition zone established by the Regional Water Quality Control Board (RWQCB). However, the prohibition zone includes properties with serious resource constraints (e.g., ESHA) and/or properties located outside of the USL. Conversely, certain developed properties are located outside the prohibition zone (and the proposed service area) and outside the USL and thus would not be eligible for sewer service. To ensure LCP consistency and avoid inappropriate growth inducement, the service area boundary needs to be made coterminous with the existing developed area (including LCP appropriate infill), and should be drawn to exclude all other (i.e., non-infill) ESHA, wetland, related habitat areas, and agricultural lands. In particular, and at a minimum, the following areas should be excluded from the service area boundary: the Elfin Forest, Sweet Springs, and other ESHA parcels within the USL generally located adjacent to Highland/Bayview Heights and east of the Broderson site. Based on a more refined habitat screening (see also habitat discussion below), we would be happy to work with you on fine tuning such a service area boundary.

Furthermore, in addition to reconfiguring the service area boundary, the effectiveness of this boundary needs to be reinforced through enforceable legal mechanisms (e.g., utility prohibition zones, utility connection prohibitions, third party one-foot non-access easements) as part of the project to ensure that only development within the service area boundary will be served by the project.

Subsequently, the LCP needs to be amended to codify the USL (and thus the urban-rural boundary) at the same location, and to make any other applicable and appropriate adjustments to conform to the operative elements of the approved project (e.g., redesignating property from urban to rural and vice versa as appropriate, accounting for agricultural mitigation sites). These subsequent and conforming LCP amendments would be separate from but related to the wastewater project, and could build on and be incorporated in the County's pending Estero USL LCP amendment, appropriately adjusted to reflect the USL after the wastewater project is clearly framed and to clearly designate areas suitable for urban or rural uses.

Finally, to further protect against potential growth inducement outside the identified service area boundary, the wastewater system needs to be clearly sized and restricted to address development and redevelopment within the urban service area so identified. On this point, the buildout numbers in the DEIR appear inflated because they fail to take into account the full spectrum of coastal resource protection constraints as well as other limitations, such as a sustainable water supply (although tertiary treatment could alter this aspect somewhat, depending on the nature of available beneficial uses). Further, we are concerned that these numbers presume development that the LCP would not allow. Build out numbers need to be based on what the LCP allows, including consideration of various resource protection and use constraints as well as those resulting from the redrawn service boundary/USL line. The project's sizing must be based on clear evidence that it will not provide or be capable of providing more capacity than necessary to accommodate LCP consistent development within the urban service area defined in the project and subsequent LCP amendments.

If these elements are effectively incorporated into the project, a secure urban-rural boundary and commitment to service that is not growth inducing can be ensured.

ESHA's, Wetlands, Other Habitats and Biological Resources

It is not clear to us from the project materials to date that all ESHA, wetlands, other habitats and biological resources have been identified and avoided to the maximum extent feasible. Lacking adequate completion of that evaluation, it is not clear that the habitat impacts are in fact unavoidable, and it is not clear that adequate mitigation for those impacts that are actually unavoidable has been identified and required. The LCP's ESHA, wetland, and other habitat and biological resources protection policies (including CZLUO Section 23.08.288(d)) allow for public facilities to be located within ESHA only where there are no other feasible alternatives and where maximum feasible mitigation measures are included. In this regard, we share the major concerns raised by the U.S. Fish and Wildlife Service in their January 29, 2009 letter commenting on the DEIR as well as those of California Department of Fish and Game in their letter of January 30, 2009. Both agencies raise significant concerns about major deficiencies in the information associated with the project alternatives as covered in the DEIR relative to biological resources information, documentation, consultation, avoidance of adverse impacts to endangered and threatened species, and adequacy of mitigation measures.

ESHA, Wetland, and Other Habitat Identification. All ESHA, wetland, and other habitat resources within the area affected by the project must be identified, mapped, and avoided. It is not clear that this has been done and therefore affects our ability to adequately comment on the project. For example, the DEIR indicates that botanical surveys have not been completed for large portions of the Tonini Ranch site. We also note that all of the known sensitive biological resources shown in Exhibit 6 of the DEIR's expanded biological analysis are not included on the project referral site layout plan (DRC2008-00103). For example, the expanded biological study identifies and maps an existing coastal stream running along the southwest side of the property, yet this coastal stream is not identified on the site layout plan included in the project referral. Instead, this area is shown to include effluent spray fields. It is clear to us that a project should not be permitted until all habitat constraints, including ESHA constraints, are clearly identified and avoided where it is feasible to do so.

Setbacks. It appears that the project also proposes reduced setbacks for certain ESHA, wetland, and other habitat areas. Similar to our discussion on habitat identification itself, LCP required setback areas need to be avoided in the same way sensitive habitat areas must be avoided, including evaluation of relocation and rerouting alternatives as necessary. This includes but is not necessarily limited to the following areas that were previously addressed in the 2004 CDP: East Paso, Sunny Oaks, Lupine Street, Donna Street Wetlands, 4th Street Wetlands (PPS), and Solano Avenue.

Spray Field Habitat Impacts. Additional analysis is needed regarding potential impacts to coastal streams and riparian habitat areas (including those identified as containing certain sensitive species, like the California red-legged frog) that could result from spraying treated effluent in

close proximity to these resources. The DEIR briefly describes a minimum required setback of 100 feet from any sensitive resource as the single mitigation measure needed to address spray field impacts on ESHA. However, it is not clear to us that this buffer distance is adequate to protect these resources as required by the LCP, particularly given only secondary treatment. In addition, and as indicated above, at least one coastal stream area appears slated for direct spraying. Further analysis is needed to address habitat impacts from spray field effluent making its way into these sensitive resource areas. The use of treated effluent spray fields adjacent to such habitat areas raises numerous questions that will need to be answered to find consistency with the LCP's habitat protection policies. For example, is a 100-foot buffer adequate to protect sensitive habitat areas from spray field impacts? Are larger buffers needed for creeks that may be occupied by red-legged frogs? How are wind and rain factored into the impact analysis? What other mitigations/site design techniques are available to avoid/minimize overspray and contaminated surface water quality impacts?

Of course, with tertiary treatment, as previously discussed, these impacts would presumably be significantly reduced. However, they must still be identified and adequately addressed (i.e., with tertiary treatment, 100 feet alone may be sufficient, but this must be clearly documented). And depending on the volume of spraying (as opposed to the volume that may be put to other beneficial use), these impacts might be further reduced or avoided. Further, it is possible that with tertiary treatment these potential ESHA impacts could be completely eliminated, or they may not be impacts so much as benefits (e.g., improved hydrologic inputs leading to habitat enhancement, recycled water for irrigation leading to less groundwater use), both in areas immediately adjacent to project elements (like coastal streams near spray fields) and on a broader environmental level (e.g., overall affect on the Los Osos groundwater basin and Morro Bay). In any event, though, the main point is that these impacts need to be clearly understood and addressed, and tertiary treatment would appear to be an appropriate way to avoid significant habitat impacts (i.e., in addition to the manner in which tertiary treatment avoids/minimizes certain agricultural and habitat impacts in other ways).

Habitat Impacts at the Broderson Site. According to the DEIR, significant impacts to ESHA will occur through the use of the Broderson site for effluent disposal as proposed. Not only will habitat be impacted when the site is developed for the leach fields, but long term maintenance of the site will also result in additional habitat impacts overtime. It is not clear to us that these impacts can be found consistent with the LCP. In particular, as discussed above, the tertiary treatment option would appear to significantly reduce habitat impacts at the Broderson site, both in terms of immediate impacts and with respect to long term impacts associated with site maintenance. Specifically, the Broderson site is home to significant habitat resources, including special status species (e.g. Morro Manzanita, Monterey spineflower, Blochman leafy daisy, Morro shoulderband snail, Morro Bay kangaroo rat, monarch butterfly). These resources would be completely removed as part of the project. According to the DEIR, impacts to ESHA will occur within 8-acres of the Broderson site. To be consistent with the LCP, these impacts must be avoided if feasible. Again, tertiary treatment would appear the method to avoid habitat impacts at Broderson to the extent feasible, including to the extent effluent disposal needs there are reduced

and/or changed, and is yet another reason that the County should consider modifying the project to provide for tertiary treatment. On this point, it should also be noted that in accordance with the previous CDP for the Tri-W site, mitigation at the Broderson site was required and, as noted in the USFWS letter, appears not to have been fully implemented. That mitigation was for impacts that have already occurred in connection with development authorized but not completed in that CDP. How this fact relates to what is now proposed at Broderson and what is considered to be mitigation there will need to be addressed.

Pump Station Locations. The pump stations proposed to be located in ESHA (or within requisite setbacks) are not allowed under the LCP. To meet LCP setback standards, the new project referral indicates that a setback adjustment is needed for two pump stations. However, the new project referral does not specify which pump stations are subject to the adjustment, nor to where they would be relocated. The project must be modified to remove such pump stations for all ESHA, wetland, and other habitat areas (see also ESHA identification above).

Treatment Plant Drainage. From the site plan included in the project referral we note that a stormwater discharge pipe is located in the ESHA. This is not consistent with the LCP. It appears clear that there are other methods of stormwater drainage and treatment that can be utilized with the project, including Low Impact Development (LID) technologies (e.g., vegetated ponds, swales, strips), that can avoid development of drainage facilities in ESHA and required buffers. We recommend that the project be revised accordingly to completely remove development from ESHA and ESHA buffers.

Trenching vs. Drilling/Boring. We concur with project specific mitigation measures discussed in the DEIR related to the implementation of trenchless technologies for the installation of conveyance pipelines within and adjacent to areas containing wetland, streams, and riparian vegetation (Mitigation Measure 5.5-A7). We also agree that the project should include pipe suspension methods for areas with existing bridge crossings along the proposed conveyance routes (particularly at the Los Osos Creek and Warden Creek crossings). In addition to reducing the amount of habitat disturbance that would occur through excavation, longer term maintenance and leak detection could be improved and impacts reduced when the pipes are visible and positioned in a location where access for repairs would be less intrusive.

Habitat Restoration. LCP ESHA Policy 3 requires the restoration of damaged habitats as a condition of new project approval when feasible. Both the LCP and the DEIR document the presence of wetland habitat in the southwestern corner of the Tonini site (Warden Creek Wetlands). However, the discussion contained in the DEIR of the habitat restoration proposed in this area is confusing. Per the LCP, we presume that damaged habitat areas in the project area are being avoided, restored where feasible, and appropriately buffered (see also above). However, from information provided to us this is not clear.

In addition and specifically, the document does not clearly identify what would be done at the Mid-Town site in this respect either. Initial construction activities at this site appear to have damaged ESHA there, and any wastewater project, including the preferred alternative that

includes a pump station in this area, must account for the impacts that have already occurred at that site. As noted above, the Broderson site was to be restored as mitigation for impacts at the Mid-Town site associated with the previously approved and permitted wastewater project. The Mid-Town site damage that occurred was to be mitigated by restoration at Broderson. Accordingly, mitigation credit at Broderson cannot be used to mitigate new impacts associated with the current project. In other words, absent some new mitigation framework that otherwise "undoes" impacts at the Mid-Town site, Broderson restoration is required whether this project moves forward or not.

HCP. It is not clear to us whether the project commits to a Habitat Conservation Plan (HCP) and HCP process to address potential impacts associated with in-fill development that would be served by the project (see also growth inducement comments above). We believe a project necessity is an accurate evaluation of such infill properties in terms of habitat constraints. Sites that are completely constrained and cannot be developed should be located outside the service area and the urban-rural boundary where feasible and appropriate. Where it is not feasible and appropriate to exclude such lands from the service area (e.g., lots completely surrounded by urban development), then that needs to be clearly explained. The results of this evaluation should be used to assist in defining the USL/service boundary, as described above. For any properties falling in this category, subsequent analysis will be required to determine whether any new development can be permitted (i.e., to avoid an unconstitutional taking). Under such circumstances, some habitat impact that might not otherwise be allowed under the LCP may be permitted. To accommodate such potential special circumstance cases, we recommend that the project include a commitment to the completion of an HCP process. It is noted that such a commitment was required as part of the Commission's previous wastewater treatment plant approval. This requirement needs to be carried over in this case as well.

Public Views

The LCP requires that development be located on the least sensitive portions of publicly visible sites, and that it incorporate design features, such as grading, screening and revegetation plans to minimize unavoidable adverse visual impacts. We note that photo simulations are not included in the project referral and the visual analysis in the DEIR is extremely limited and therefore unacceptable. The DEIR provides only a single view simulation from Los Osos Valley Road and is not adequate to fully evaluate and understand the potential negative impacts to scenic resources. Similarly, the materials we have seen are lacking in terms of proposed grading and landscaping parameters, including the manner in which such grading and landscaping could have its own view impacts and/or, conversely, could help to offset certain potential impacts (e.g., through berming/landscape screening). It is clear to us that additional public viewshed impact analysis is warranted. Specifically, we recommend that a supplemental visual and scenic resource analysis be provided for each potential development site (including those evaluated to date, as well as alternatives that are appropriate based on these comments, including analysis taking into account modifications that may be required if tertiary treatment is incorporated) that evaluate viewshed impacts from all public view corridors (for the County's currently proposed site, such evaluation must at a minimum include varying views of the sites from Los Osos Valley

Road and Turri Road). We recommend that the project be modified to make best use of existing topography to hide development from public view, and to include natural-looking berming and landscaping to screen development that is unavoidably sited in the public viewshed so that adverse visual impacts are minimized. From what we understand to date, and with the various project modifications associated with the recommendations above, it appears that there are sites capable of accommodating the proposed project facilities of the scale and scope needed that can be effectively hidden from public view.

In conclusion, we fully support measures to address the community's wastewater problems. We underscore that, in our opinion, a modified tertiary treatment project, as discussed, is a prerequisite for approval consistent with the LCP and the Coastal Act. There is little doubt that tertiary treatment can significantly reduce adverse environmental impacts as well as reducing adverse impacts to agricultural lands and uses. It can also assist in addressing community water supply problems, which, although not a primary project objective, should be part of a broader discussion of community needs and benefits derived from a project that includes tertiary treatment. This is particularly appropriate given that the project represents a significant public infrastructure investment which is capable, if properly conceived, designed and carried out, of achieving multiple public and community benefits.

We note, in closing, there may be additional issues that need to be addressed that we either were not aware of or that arise as a result of response to the discussion of our concerns in this letter. We would be happy to meet with you and will make every effort to make available time to move this important project to completion within the context of full compliance with Coastal Act and LCP requirements. Feel free to contact me if you have any questions or if we can be of further assistance.

Sincerely,

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