LOS OSOS WATER QUALITY IMPACTS

And

STATUS OF SEWER PROJECT

By

Central Coast Regional Water Quality Control Board

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SUMMARY

Los Osos septic tanks are causing severe environmental problems in Morro Bay and surrounding areas. This is a surface water (Morro Bay National Estuary) problem and a public health problem in addition to a groundwater problem. The septic tank discharge prohibition zone was established by the Regional Board in 1983.

Septic Tanks Have Caused Health and Environmental Hazards:

Los Osos is a community of 15,000, adjoining Morro Bay State and National Estuary. Many of the community's 5,000 homes are on very small lots (some as small as 25 or 37 feet wide by 125 feet deep) and shallow groundwater which surfaces in some areas during wet weather cycles. In addition to homes, there are business and government buildings. The vast majority of homes and other buildings use septic systems for waste disposal.

Many of the small lots that are too small for leachfields use seepage pits which discharge directly to groundwater, or with very little separation. Today, seepage pits are only allowed in California where adequate soil depth, underlying geology and groundwater make such systems viable without environmental impacts. Seepage pits are vertical (15-25 ft. deep) rock-filled chambers used to disburse septic tank effluent into the adjacent soil. In some cases, septic systems use leach fields, but because of small lot size and shallow groundwater, they too discharge directly to groundwater from some Los Osos lots. To function properly, there needs to be sufficient separation between the leaching devices and groundwater so that adequate assimilation and treatment of waste can occur. This problem cannot be corrected with system maintenance or repair because development is too dense, groundwater too high, and the underlying geology is unable to handle the current volume of waste (approximately one million gallons per day of wastewater has contributed to long-term rising groundwater, which makes the problem worse).

Septic tanks severely pollute shallow groundwater with pathogens and nitrate. Shallow aquifer pollution also threatens the deep sole-source drinking water aquifer. Levels of nitrate in groundwater have increased from approximately 6 ppm in 1954 to currently over 45 ppm (drinking water standard for nitrate) in most of the area, with significant areas exceeding 60 ppm. Shallow aquifer wells have been shut down due to nitrate exceeding health levels.

A DNA study completed in 2002, proved Los Osos groundwater seeps discharge human waste to Morro Bay. As part of the 2002 DNA study to determine the sources of fecal coliform bacteria in Morro Bay, the groundwater seeps at the foot of the bay were sampled. Test results ranged from 10 to 10,000 MPN, with the highest single source (per DNA) being human feces. Basin plan limits for body contact recreation are a 30-day log mean of 200 MPN with no more than 10% of the samples exceeding 400 MPN. Limits for shellfish growing areas, such as Morro Bay, are total coliform bacteria median of 70 MPN, with no more than 10% of the samples exceeding 230 MPN/100 ml. This means there is a discharge of human waste to Morro Bay caused by the septic tanks. This discharge is not only a direct human health threat, it also threatens wildlife and

the shellfish industry in the Bay. While a direct cause and effect relationship has not been established, shellfish rainfall closures occurred approximately 104 days in 2002, and 74 days in 2003. Follow-up seep sampling in 2004 confirmed high coliform concentrations discharging to the Bay. The critical point is that human waste is seeping into the Bay, which includes shellfish habitat, and impacting habitat that is already impaired as evidenced by the shellfish closures, and the 1998 and 2002 303(d) lists identified Morro Bay as impaired by pathogens. In addition to shellfish, recreational uses of the Estuary are threatened by on-going seeps of bacteria-laden water to the Bay.

During wet weather, septic tank effluent (primary treated, undisinfected sewage) surfaces in numerous areas and floods yards, streets and gutters. People, pets and wildlife are exposed to pooling human waste. Coastal Commissioners have directed the Los Osos Community Services District (CSD) to evaluate impacts from the community sewer on "wetlands" created by failing septics. Water that eventually does run off to the Bay can be high in nitrate and pathogens from surfacing effluent.

One million gallons per day of sewage continues to be discharged to the community's groundwater and seeps to Morro Bay State and National Estuary. The community wastewater project will end human waste discharges to Morro Bay, end health hazards of surfacing effluent, and greatly improve groundwater quality.

Regulatory History of Sewer/Treatment Plant Project:

In 1983, the Regional Board prohibited septic tank discharges after 1988, but the sewer and treatment plant were delayed six years due to lawsuits and permitting delays.

In the 1980's and 90's, San Luis Obispo County developed a project that withstood litigation (CEQA and challenge to special assessment district). The State Water Resources Control Board committed a low-interest loan. The County issued a Coastal Development Permit (CDP) for a project that included a treatment plant outside of town. In 1997, the Coastal Commission considered appeals of the Coastal Development Permit and requested independent evaluation of the project. In 1998, after the independent evaluation supported the project, the Commission requested the residents to form a CSD to sponsor the project. Once the CSD was formed, the County lost jurisdiction over the project. By that time, the County had spent $6 million on project development.

The community's newly formed CSD designed a new project, at a new site in town, including CEQA review. Los Osos property owners voted overwhelmingly (85%) for the new assessment district. The CSD secured a State Board loan. The CSD also won an environmental justice lawsuit in federal court and several superior court challenges.

In 2002, the CSD obtained a Local Coastal Plan amendment for the Project site. The amendment included approval of the project site and was based on a record that included an extensive EIR. The EIR included a detailed comparison of the current ("Tri-W") site and the Andre site favored by some residents. The CSD spent about $19 million, most of it after the Local Coastal Plan amendment approval, on 100% design, plant and disposal site purchase and a 72-acre mitigation site.

In 2003, the Regional Board issued waste discharge requirements (a water quality permit) for the project. California Cities Water Company challenged the WDRs and the Regional Board prevailed in the lawsuit.

In 2004, the County issued a Coastal Development Permit for the CSD project. A small group of citizens appealed and the Coastal Commission voted to hold a full hearing. The hearing took place in August 2004, and the Coastal Commission issued a permit. The Regional Board Executive Officer warned the District in writing and in person that if the District delayed the

project, he would recommend enforcement for violating the Time Schedule Order the Board had already issued to the CSD.

The CSD requested bids, awarded three contracts (two for collection system areas and one for the treatment plant), and construction began in August 2005. In September 2005, a recall election replaced three pro-project board members with new board members who support moving the project and/or designing a different type of plant. The CSD issued temporary stop work orders to all three contractors on October 3, 2005. We have been informed that CSD board is considering whether to terminate one or more of the contracts.

The Regional Board Executive Officer issued a complaint to the District for $11.19M on October 6, 2005.

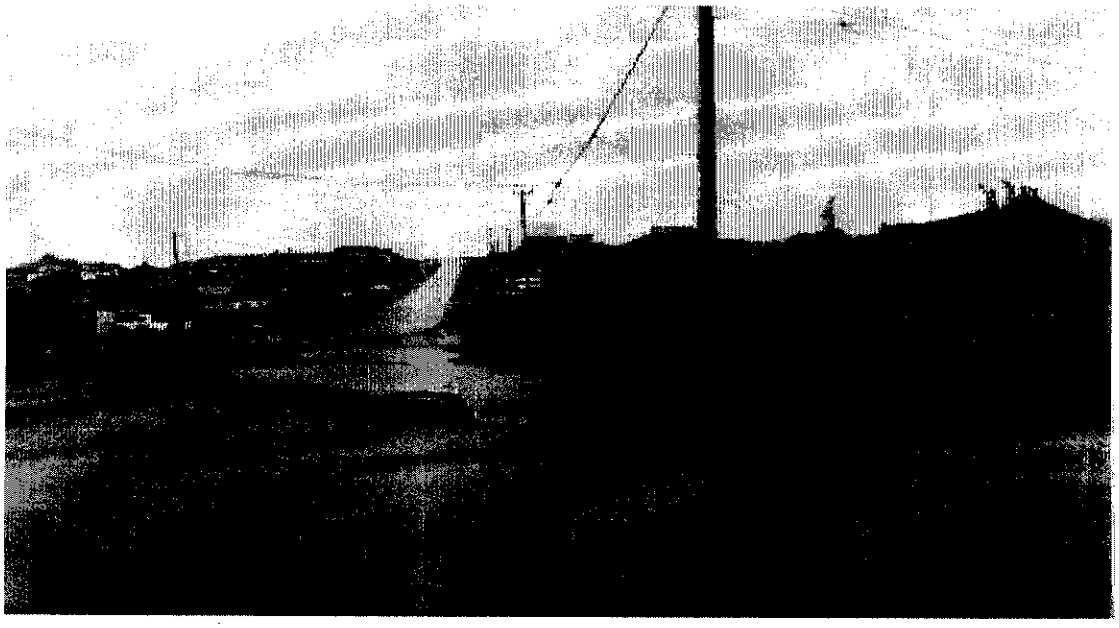
ATTACHMENTS

1. Photos showing wet weather problems from high groundwater, causing surfacing of septic tank effluent. "Historic" photographs are circa 1983; others are from January 2002.
2. Photo Rainfall Information
3. Chronology
4. Measure B

ATTACHMENT # 1

Photos Showing Wet Weather Problems from High Groundwater

1983 Photo - 16th & Paso Robles Streets
prior to installation of ground water drain system



1983 Photo - 16th & Paso Robles Streets
prior to installation of ground water drain system

1983 Photo - Back yard flooding

1983 Photo - Typical neighborhood flooding (Nipomo St)

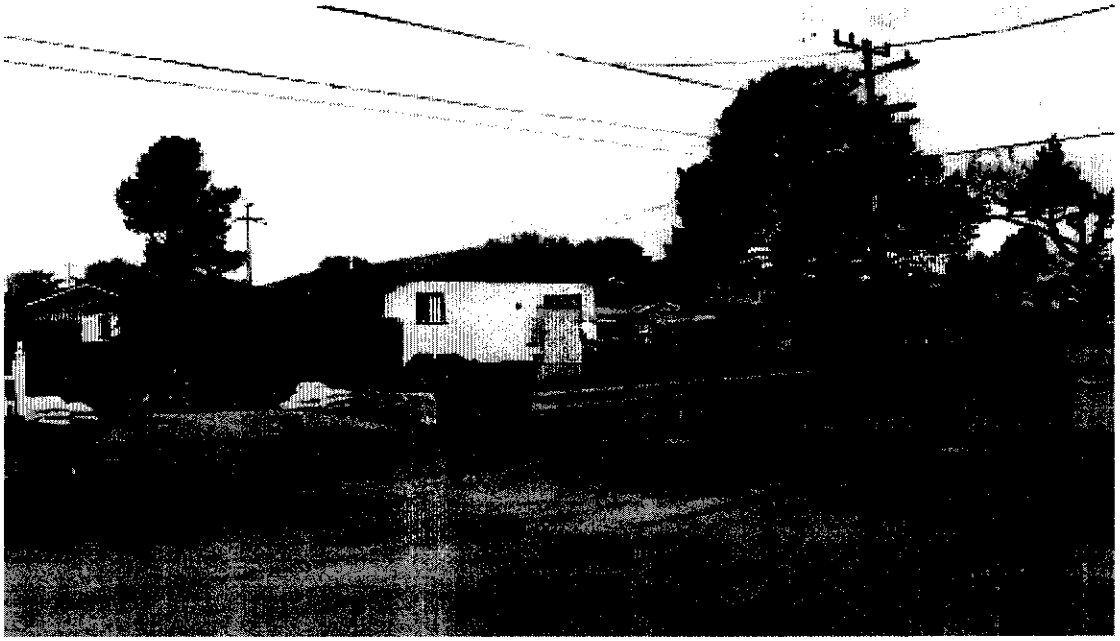
16th & Paso Robles Streets
with shallow ground water drain system
January 2002

Typical neighborhood flooding – January 2002

Typical neighborhood flooding (Nipomo St)- January 2002

8th & El Morro ground water drain system January 2002

(note supply of sand bags to keep water out of home)



ATTACHMENT # 2
Photo Rainfall Information

Rainfall for the season 2001-2002 (July 1st- June 30th) = 404.88 mm. See Attachment # 1 above for photos taken January 2002.

Historical Annual Average = 565.15 mm

November 2001 monthly average total = 151.38 mm (Historical average=50.42 mm)
December 2001 monthly average total = 106.17 (Historical average = 98.21 mm)

The historical photos are from 1983. Annual average rainfall for that season 1982-1983 was 1203.71 mm (only surpassed by 1969). See Attachment # 1 above for photos taken in 1983.

The 1983 photos show clear and massive flooding, including commingling of septic tank effluent due to very wet year.

The two years prior to 2002 were average to slightly higher than average rainfall seasons. Thus, ponding of water/rising groundwater seen in the community of Los Osos in January 2002 occurs regardless of whether there exist high or extremely high average rainfall conditions. Rainfall amounts three times higher than average in November 2001, and slightly higher than average in December 2001 likely exasperated the observed ponding shown in photos from January 2002.

ATTACHMENT # 3 - Chronology

For more than thirty years, the Regional Board and Community of Los Osos have labored to solve this problem:

1971 The Regional Board adopts an Interim Basin Plan, finds increasing nitrate pollution in Los Osos shallow groundwater. The Regional Board imposes a septic tank discharge prohibition effective 1974.

1975 The Regional Board's Basin Plan recommends sewerage feasibility study, with technical studies to be completed mid-1976, to comply with a prohibition of all proposed and existing wastewater discharges in Los Osos, as of January 1, 1980.

1979 San Luis Obispo County (County) funds water quality study, which concludes septic systems are contaminating groundwater.

1983 County plans community sewer and Regional Board adopts prohibition of septic system discharges (Resolution No. 83-13), with refined boundaries (based on density, depth to groundwater, nitrate concentrations, the urban services line, etc.), effective 1988 (when sewer was expected to be completed). The State Board ratified this amendment to the Basin Plan before it became effective (Resolution No. 84-14).

1984 The State Board declines to review a petition by Citizens for Affordable Wastewater Systems challenging Resolution No. 83-13, because its petition review statute does not include review of Basin Plan amendments.

1988 Because of resistance to the project by some Los Osos residents (dischargers), the County made little progress on the sewer project. The County had not progressed beyond the planning stage. The Regional Board determined that the community could not possibly comply with the prohibition by the November 1988 deadline. After that determination, the Regional Board immediately prohibited discharges from new buildings or expansions of buildings using septic tanks for disposal. This was not a building moratorium because new buildings were permitted if they have an alternative waste disposal method or qualified for an exemption under Basin Plan rules.

1990 County forms assessment district to pay for the sewer project, followed by several years of litigation by sewer opponents; CAWS (Citizens for Affordable Wastewater Systems v. San Luis Obispo County (Superior Court). The first lawsuit challenged the Environmental Impact Report (EIR) but the County prevailed.

1991 CAWS sued the Regional Board challenging validity of Resolution No. 83-13 but the court ruled it was too late to challenge the resolution. They also sued the County challenging the special assessment district. The Court ruled in favor of the County in 1992.

1993 State Board supports project with State Revolving Fund (SRF) loan priority funding.

1994 California Court of Appeal rejects CAWS appeal of the Superior Court ruling on the special assessment district. The County had decided to put the project on hold until the appeal was complete. The state Supreme Court did not review the case.

1995 County re-evaluates project alternatives to reduce project costs. County Board of Supervisors votes unanimously to proceed with the project, supplemental environmental work and design. Regional Board issues a Time Schedule Order against the County under Water Code section 13308, specifying a schedule for completing the project by 2004 and $10,000/day penalties for failure to do so. County does not oppose the Order.

1997 The County issues a Coastal Development Permit (CDP) for the Project and citizens group (Taxpayers Against Percolation Ponds/TAPPs) appeals the CDP to the Coastal Commission. Coastal Commission staff recommends approving the CDP. Coastal Commission requests an independent re-evaluation of alternatives to project. Superior court rules in favor of the County (upholding the project) in CAWS v. San Luis Obispo County (CAWS contended that minor modifications to the project conditions occurring at the CDP hearing necessitate a new EIR).

1998 Independent evaluation of alternatives concludes County project is the most favorable from environmental, regulatory and cost considerations. Formation of the Los Osos CSD is supported by 87% voter approval. The County abandoned its project because it lost jurisdiction once the CSD was formed. The CSD decides not to proceed with the County Project but to design its own at a different site from the County's.

2000 Los Osos CSD develops technically, environmentally and fiscally sound project through exhaustive process including consulting experts on a variety of subjects, representatives from all pertinent federal and state agencies, and dozens of public workshops and meetings. The Regional Board adopts a Time Schedule Order requiring project completion by 2004.

2001 Final EIR approved and not challenged. Assessment district is formed to pay for portions of the project not covered by SRF Loan. State Board approves $2 million grant from Prop 13 funds supporting project mitigation area. A group of Los Osos residents (many CASE members) filed a federal suit claiming violation of civil rights based on environmental justice (Keller v. Los Osos CSD). This case was promptly dismissed by the District Court and later (2002) by the 9th Circuit Court of Appeal. Another group of residents filed suit in superior court challenging the validity of the assessment district formation (Coleman vs. Los Osos CSD).

2002 Coastal Commission approved Local Coastal Plan (LCP) Amendment, changing treatment plant site zoning from commercial to public facilities. This amendment was approved based on balancing a number of factors including feasibility and environmental impacts that the Tri- W site was acceptable for the project. CASE sued the Coastal Commission challenging their approval of the LCP amendment. The Commission actively defended the suit and the Superior Court dismissed, finding the petitioner failed to exhaust administrative remedies. Grand Jury completed investigation into the formation of the assessment district and found in favor of Los Osos CSD, supporting the assessment district and project.

2003 Regional Board adopts waste discharge requirements (WDRs) for project. Cal Cities Water Co. files petition with the State Board, contending that community sewer project will degrade groundwater. State Board denies the petition. Coastal Development Permit approved unanimously by County Planning Commission, appealed to Board of Supervisors and upheld unanimously by Board of Supervisors. In November 2003, local citizens groups appeal CDP to Coastal Commission. State Board notifies CSD that the SRF loan would be in jeopardy, if the project were delayed.

[The following chronology is not complete.]

August 2004 Coastal Commission issues local coastal permit.

2004-2005 Numerous lawsuits filed against the State Water Resources Control Board challenging the SRF loan, and against the District challenging the project.

Approximately August 2005 SRF Loan contract signed, construction contracts signed, construction commences.

September 27, 2005 Local election held. Three pro-project CSD directors are recalled and three new directors are elected on a platform of moving the sewer location. Measure B enacted. (Measure B is the subject of a legal challenge pending in the California Court of Appeal, Second District.)