

**STATE OF CALIFORNIA
REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST WATER BOARD**

STAFF REPORT FOR THE REGULAR MEETING OF OCTOBER 21, 2005

Prepared on September 20, 2005

ITEM NUMBER: 11

SUBJECT: Resolution No. R3-2005-116 in support of the South Coast Beach Communities Septic-to-Sewer Project, Santa Barbara County

SUMMARY Analytical results show that sanitary waste discharged from the homes on Rincon Point enters Rincon Creek and the Pacific Ocean, thereby threatening the public's health and beneficial uses of Rincon Creek and the Pacific Ocean. Most residents at Rincon Point and other beach communities have requested that the Carpinteria Sanitary District (CSD) provide sewerage service. Staff recommends the Board adopt Resolution R3-2005-116 (Attachment 1) in support of the sewerage project.

BACKGROUND

CSD treatment plant. The CSD operates a modern and effective plant that treats the District's municipal wastewater in continual compliance with effluent limitations specified in waste discharge requirements adopted by the Central Coast Water Board in Order No. 00-001. CSD discharges disinfected plant effluent to the Pacific Ocean through a 1,000-foot-long ocean outfall/diffuser system. CSD has determined the plant has sufficient capacity to treat wastewater from the communities which have requested sewer service (Rincon Point, Sand Point Road, Padaro Lane and Sandyland Cove).

Setting. Seventy-two homes occupy Rincon Point, the alluvial fan of Rincon Creek, which forms the boundary between Ventura and Santa Barbara Counties. The watershed is sparsely populated upstream of the homes on the point. The Rincon Creek watershed is entirely within the Central Coast Region. The homes densely occupy the point on lots usually smaller than a quarter acre and all are served by septic tanks. All the septic tanks discharge to leachfields except one, which uses a drywell 40 feet deep. Soils are

permeable alluvium and the water table is sometimes within five feet of the ground surface. The shallow groundwater and small lot sizes severely limit the area available to replace and repair the existing systems.

Historic attempt to provide sewerage. In the 1970's and 1980's, the State and Regional Boards administered the Publicly Owned Treatment Works construction grants program authorized by the Clean Water Act. The program subsidized construction of wastewater facilities, including sewers, throughout the United States. No grants-funded sewer was extended to the homes on Rincon Point from the Ventura treatment plant although sewers were provided to other communities between Rincon Point and Ventura. The sewer was not extended to La Conchita, a few miles east of Rincon Point. Ventura County Health Department staff report, to their best recollection, that La Conchita residents refused to participate because many subsisted on fixed incomes and believed they could not afford to pay their share of the sewer cost. La Conchita is in the Los Angeles Region and remains unsewered.

Basin Plan. This Region's Water Quality Control Plan (Basin Plan) establishes municipal and domestic supply (MUN) and water-contact recreation (REC-1) as existing beneficial uses, among others, in Rincon Creek. The presence of sewage would impair the MUN and REC-1 beneficial uses.

The Basin Plan specifies site and design prohibitions and recommendations for new soil absorption systems. The Basin Plan requires adequate separation between the disposal system and underlying groundwater, appropriate soil types, and adequate lot sizes.

Studies and reports. Two studies found domestic wastewater pollutants in Rincon Creek and the Pacific Ocean.

1. In October 1999, the Santa Barbara County Environmental Health Services Division, in cooperation with Heal the Ocean, prepared the *Lower Rincon Creek Watershed Study* for the Santa Barbara County Public Health Department and the County Water Agency. The study used DNA analysis to compare the sources of bacteria in water samples taken from the lagoon at the mouth of Rincon Creek, the ocean at the beach between the homes and the ocean, and a culvert upstream of the homes.

Bacteria in 20 percent (25 in number) of the total number of samples was of human origin. Moreover, all bacteria of human origin were found in samples taken from the creek lagoon or the ocean at the beach. No sample from the culvert upstream of the homes contained any bacteria from humans.

2. In January 1999, Project Clean Water staff at the County Water Agency took samples from seven stations in the creek and the ocean near the beach. All samples contained methylene blue active substances (MBAS), which are in detergents and surfactants. If a creek contains MBAS, then domestic wastewater is a likely source.

In June 2003, to rank the county's problem areas, Questa Engineering conducted a sanitary survey of on-site treatment systems. The survey characterized the areas using the following criteria: soils constraints, system density, number of systems, system type and age, threat to surface water uses, threat to groundwater uses, and evidence of water quality impact. Consultants and contractors who responded to the questionnaire distributed by the surveyors described the area as a "medium to high septic system problem area." The survey ranked Rincon Point with areas least suited for on-site disposal systems, and recommended the homes connect to the sewer.

Support for project. In a February 11, 2004 letter to the CSD Board, the Executive Officer stated: "we support the proposed project to build sanitary sewers in the communities..." The majority of the Rincon Point homeowners requested that their homes be connected to the sanitary sewer, and the Carpinteria Sanitary District (CSD) has started the series of tasks necessary to do so. A citizens' advocacy group, Heal the Ocean (HTO), has supported the project and helps fund some tasks, including legal defense costs.

Santa Barbara County has provided support by participating in health studies and funding a sanitary survey. Members of the Health Department staff have stated their strong support for the sewer project. However, the threats to public health at Rincon Point and the other communities have not risen to the level, such as a number of acute illnesses, where the County Health Officer has declared a Health Emergency. Such a declaration would be necessary for the County to require the community to install sewers.

In response to the request for sewerage from the communities, the CSD funded a Preliminary Engineering Study (June 1, 1999), which recommended sewers be constructed to the CSD treatment plant. Shortly thereafter, CSD funded a second study to determine the best alignment for the trunk sewer from Rincon Point to the CSD plant.

To fund the Environmental Impact Report for the project, CSD then attempted to form an assessment district of the communities to be sewerred. Three persons sued, alleging the EIR must be completed before an assessment district could be formed. The CSD decided to prepare the EIR and applied to the State Water Resources Control Board (State Water Board) for a Proposition 13 grant in the amount of \$425,000. The State Water Board agreed, assigning the project the highest priority, and the grant monies then funded the EIR. In summary, the County of Santa Barbara and the State Water Board have supported the CSD's efforts (in the amount of \$67,000 to date from the CSD) to sewer the area and thereby eliminate the public health threat.

Request for Board action. Three homeowners oppose the project and have sued several times to stop it, to date unsuccessfully. In a June 24, 2005 letter (Attachment 2), HTO requested the Central Coast Water Board provide immediate "regulatory help" for the project. HTO suggested the Central Coast Water Board adopt a cease and desist order, a cleanup or abatement order, or a resolution supporting the project.

DISCUSSION

Data evaluation. As noted above, samples from the ocean and from Rincon Creek adjacent to the homes contained bacteria from humans. Additionally, seven samples from the creek and ocean near the community contained MBAS.

Significant levels of bacteria originating from within the human body have apparently entered the creek in sewage. Also, MBAS, a constituent of detergent and surfactants, is found predominantly in domestic wastewater, originating from washing machines and other domestic uses of detergents and surfactants. The homes on Rincon Point are the likely source of the sewage because samples upstream of the community contained no human bacteria while only samples from the creek and ocean adjacent to the community contained bacteria discharged in human bodily waste.

Contributory factors. The presence of human bacteria and MBAS in surface waters adjacent to the community indicate that the soils underlying the soil absorption systems are not adequately filtering bacteria from the sewage before its flows into the creek and ocean. As noted above, the Central Coast Water Board adopted Basin Plan recommendations crafted to ensure soil absorption systems adequately filter bacteria from septic tank effluent before the wastewater enters the underlying groundwater. The Basin Plan recommends that soil absorption systems be:

1. Sited in soils capable of filtering bacteria from the domestic wastewater.

2. Constructed on lots large enough to accommodate the many discharges from individual homes without exceeding groundwater's capacity to assimilate the wastes.
3. Separated from underlying groundwater by a depth of soil adequate to provide the necessary filtration.
4. Designed to distribute the treated effluent so groundwater retains its capacity to assimilate the pollutants.

No absorption system at any of the subject communities likely complies with all of these criteria. On their small lots, the homes crowd the alluvial fan and beachfronts, and discharge their sewage to a highly permeable alluvium with little ability to filter pathogens from the wastewater before it enters the groundwater below. The soil absorption systems provide inadequate treatment, which is why water samples from the creek and ocean contained human bacteria, including pathogens.

Regulatory options. Staff has considered various enforcement options available to the Board to support sewer hookup of these areas:

1. A cease and desist order may be used only to achieve compliance with an existing Board Order or prohibition. Therefore, the Central Coast Water Board cannot issue a cease and desist order in this case because the Board has adopted no order or prohibition to regulate the discharges.
2. Cleanup or abatement orders would require staff to demonstrate that sewage discharged from a given home (a) enters the creek or ocean, or will probably do so, and (b) causes pollution or nuisance, or threatens to do so. The Executive Officer could then adopt a cleanup or abatement order for each property owner or occupant who is violating this standard. The cleanup or abatement orders could require dischargers to take actions to eliminate or reduce discharges to the Creek and the ocean. Cleanup or abatement orders could impose requirements such as frequent pumping or an equivalent solution, in the absence of available sewerage facilities. This course of action would be more staff intensive and take longer to complete, and

- would not directly order any entity to construct a sewer system.
3. Staff could require each homeowner to submit a report of waste discharge and the Board could then adopt waste discharge requirements regulating the discharges. Waste discharge requirements can prohibit illegal discharges and impose effluent limitations on sewage discharges as needed to comply with water quality objectives, or require sewer hookups or an acceptable alternative. This may be a better course of action but would still require significant staff time.
 4. The Board could establish a zone in which individual sewage disposal systems are prohibited, similar to the prohibition zones in Los Osos and Nipomo. The Board would adopt a resolution establishing such a zone. The process could require over a year to complete because the Board must amend the Basin Plan in a public meeting based on findings that the discharges from the homes cause pollution or nuisance. Basin Plan amendments must also be approved by the State Water Board and the state Office of Administrative Law.
 5. The Board could adopt a resolution in support of the project. This approach may provide leverage to allow the local agencies and interest groups to complete the project, which staff believes is the most effective way to address the discharges and protect water quality.

At the July 8, 2005 Board meeting in San Luis Obispo, Ms. Hillary Hauser of HTO and two Rincon Point homeowners (Ms. Terry Taylor and Mr. Steve Halsted) addressed the Board and requested regulatory action. Board members directed staff to draft a resolution for the Board's consideration.

CONCLUSION

Surface water monitoring data show that the Rincon Point homes discharge sewage to Rincon Creek and the Pacific Ocean. The other beachfront communities may also discharge untreated sewage to the Pacific Ocean. After considering a number of treatment alternatives, CSD's engineering study recommended the communities be

sewered and their wastewater be treated at Carpinteria's plant and safely disposed of in the Pacific Ocean. Based on the discussion above, Staff concurs that the CSD should sewer the communities and treat their wastewater at the plant.

Staff recommends that the Board adopt the proposed resolution of support of the Septic-to-Sewer project. The proposed resolution recommends CSD provide sewerage to the communities as soon as possible.

RECOMMENDATION

Adopt Resolution No. R3-2005-0016, as proposed.

ATTACHMENTS

1. Resolution No. R3-2005-0016
2. Letter from Heal the Ocean

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