

State of California
California Regional Water Quality Control Board
Santa Ana Region
March 4, 2011

Staff Report

ITEM: 11

SUBJECT: Update on the Status of the Prohibition on Septic System Use in the Quail Valley Area and Plans for Sanitary Sewer Systems for the Area

INTRODUCTION

On October 3, 2006, the Regional Board adopted Resolution No. R8-2006-0024 that amended the Water Quality Control Plan for the Santa Ana River Basin (Basin Plan) to establish a prohibition on septic tank-subsurface disposal systems (septic systems) in a portion of southwestern Riverside County known as Quail Valley. The prohibition became effective on August 20, 2007 after it was approved by the State Water Resources Control Board and the Office of Administrative Law.

QUAIL VALLEY AND TRIBUTARY AREAS

At the time of adoption of the septic system prohibition, Quail Valley was in an unincorporated area of Riverside County. On October 1, 2008, the Quail Valley area was incorporated into the City of Menifee. The Quail Valley area is located northeast of the City of Canyon Lake and surface drainages from the area are tributary to Canyon Lake, a municipal drinking water supply source. Overflows from Canyon Lake are discharged into Lake Elsinore through the San Jacinto River. Canyon Lake is listed on the Regional Board's Clean Water Act Section 303(d) list of impaired waterbodies, impaired due, in part, to high bacteria levels in the lake. Both Lake Elsinore and Canyon Lake are also listed as impaired for nutrients.

BACKGROUND

The Regional Board adopted the Basin Plan amendment in 2006 based on evidence of adverse water quality and public health and nuisance problems caused by failing septic systems in the area. There is no sanitary sewer service available to most areas¹ of Quail Valley. Eastern Municipal Water District (EMWD) provides sewer service to most areas of the City of Menifee and Elsinore Valley Municipal Water District (EVMWD) provides sewer service to the City of Canyon Lake.

Most residents¹ in Quail Valley use septic systems. During the heavy storm events in 2004 and 2005, the septic systems in the Quail Valley area were failing at an alarming

¹ A new development at the border of Canyon Lake and Quail Valley had installed sanitary sewers.

rate. Approximately 37% of the Quail Valley area residents had sewage or grey water discharges to the ground surface during 2005. These systems were failing mostly because of: (1) high groundwater; (2) poor soil conditions; (3) shallow impermeable strata; and (4) poor maintenance of septic systems. In 2005, there were approximately 1,400 residents using septic systems in the Quail Valley area. As soon as Regional Board staff became aware of the severity of the situation in Quail Valley, it was recognized that surfacing septic tank effluent not only posed a threat to public health, but was also impacting the beneficial uses of Canyon Lake. In response, a working group was formed (made up of staff from Riverside County Health, Eastern Municipal Water District, Elsinore Valley Municipal Water District, the City of Canyon Lake, the Canyon Lake Property Owner's Association, the County Board of Supervisors and Regional Board) to explore solutions.

If septic systems were to be installed on all the buildable lots in Quail Valley, the total number of septic systems in the area could reach approximately 3,900. Septic systems can be an effective method for wastewater management when their use is balanced against a number of environmental factors such as septic system density, beneficial uses of the waters into which they discharge, depth to groundwater, and soil type. The septic systems must be properly engineered, installed and maintained, and the soil characteristics must be appropriate. As indicated above, in Quail Valley, generally the soils have high percolation rates and the groundwater in the area is high, making the conditions unsuitable for septic system use. These conditions, combined with the high density of septic systems in the area, were causing violations of the Basin Plan water quality objectives and impairment of beneficial uses, and were causing or contributing to conditions of pollution, contamination and nuisance. Because of these conditions, after a number of public workshops and a public hearing, the Regional Board adopted a Basin Plan amendment prohibiting the discharge of wastes from septic systems in the Quail Valley area.

DISCUSSION

The Basin Plan amendment, Resolution No. R8-2006-0024, amended Chapter 5 of the Basin Plan. This amendment prohibits the discharge of wastes from new and existing septic systems in the Quail Valley area if a sewer to serve the lot is constructed. In its early attempts to explore the feasibility of providing sewer service to the area, EMWD conducted a study, "Quail Valley Sewer Improvements Alternatives Study". In this study, the Quail Valley area was divided into 9 subareas. Of these, subareas 4 and 9 had the highest density of septic systems and the highest septic system failure rates.

The Basin Plan amendment prohibits the discharge of wastes from new or existing septic systems in all areas of Quail Valley if a sanitary sewer system is built in the area to serve the entire community. However, because of the terrain and the hydrogeologic conditions in the area, preliminary studies by the sewerage agencies indicated that it may not be feasible to provide sewer service to the entire Quail Valley area. So the amendment included a provision that new septic systems need not be prohibited except in subareas 4 and 9, if reasonable progress towards installation of sewer service to

areas 4 and 9 were made within five years of the effective date of the Basin Plan amendment. The Basin Plan amendment became effective on August 20, 2007.

As indicated above, areas 4 and 9 had the highest density septic system use and the most failures. Most other subareas had larger lots. If areas 4 and 9 were to be completely sewerred, new and existing septic systems in other subareas of Quail Valley would not be a significant water quality problem. Under this scenario, new septic systems could be approved in other subareas. This was based on the expectation that the seweraging agencies in the area would be able to procure sufficient funding for the sewer project in the Quail Valley area and they should be able to provide sewer service at least to subareas 4 and 9. At a minimum, a sewer system design must be completed in order for new systems to be permitted in subareas other than 4 and 9. In addition, the Basin Plan amendment did not provide for any exemption process to allow approval of new systems on individual lots.

As discussed further below, the seweraging agencies have not made significant progress towards constructing a sewer system for subareas 4 and 9. Under this condition, new septic systems should not be permitted in any area of Quail Valley.

PROGRESS ON SEWERING QUAIL VALLEY AREA

A preliminary study for providing municipal sewer service to Quail Valley was commissioned by EMWD. The feasibility of various methods of serving the area was examined. The study concluded that sewer service was feasible to the more densely populated portions of Quail Valley, but at a substantial cost. The estimated cost of service for the overall Quail Valley community was estimated to be \$89 million. This translates to an approximate cost of service, including connecting to the sewer and abandoning the septic tank, of \$30,000 per lot.

Both EMWD and, most recently, the City of Menifee have been pursuing sources of grant money to build a sewer system in stages. State and federal sources have been contacted. Unfortunately, the competition for the available grant funds is substantial. Less than \$200,000 has been obtained to date that has been spent to advance, but not complete, the process of designing a system to provide sewer service to only 42 percent of the more densely populated areas.

The Regional Board, through its Supplemental Environmental Projects (SEP) program, has provided to EMWD \$290,500 for addressing the water quality problems stemming from the failing septic systems in Quail Valley area.

As explained above, the City of Menifee, EMWD and EVMWD continue to explore additional funding sources for the Quail Valley sewer project.