DATE: September 30, 2004

FROM: Rebecca Tuden  
Water Quality Liaison

SUBJECT: STAFF REPORT: East Shore Community of Tomales Bay – On-site Individual Sewage Systems

I. BACKGROUND

The East Shore Community of Tomales Bay is an unincorporated rural community located on the shoreline of Tomales Bay in Marin County, on Highway One about 10 miles north of the entrance to San Francisco Bay. Estuarine mudflats on the Bay side and agricultural lands on the inland side surround the Community. The Tomales Bay ecosystem provides habitat to steelhead fisheries, marine mammals and extensive bird populations. The Bay supports active human recreational uses including boating, kayaking and fishing, and sustains the third largest shell fishing industry in the State of California.

The groundwater table in the area is quite shallow and approaches within a few feet of the surface of the ground during the raining season. The local soils have a high proportion of sand and are very porous. The combination of inadequate soil structure and high groundwater combined with small lots and inadequate setbacks to the Bay provides poor conditions for adequate treatment of septic wastes from the residences and businesses in the community and precludes the installation of effective new septic systems.

II. COMMUNITY SEWAGE DISPOSAL SYSTEMS AND POTENTIAL SHELLFISH CONTAMINATION

All of the approximately 95 existing residences and small businesses are served by individual septic tanks, most of which are antiquated and do not meet current wastewater standards. A 2001/2002 survey of East Shore systems located within 100 feet of the Bay, or a direct tributary of the Bay, demonstrated a failure (direct sewage discharge) or marginal rate as high as 40% of the total systems. In summary, the high failure rate, older systems and close proximity to Tomales Bay indicate a water pollution problem and potential public health risk from sewage contamination.
The Tomales Bay watershed has been placed on the federal Clean Water Act’s 303(d) list as impaired for pathogens, nutrients and sediments. On-site wastewater disposal systems have been identified as a significant source of pathogens to the Bay.

Of particular concern is the potential risk from faulty septic systems to the commercial shell fishing lease areas in Tomales Bay. Approximately 3 commercial shellfish beds are located along the Eastern Shore of Tomales Bay; some are less than 500 feet from existing homes and their on-site wastewater systems. In May of 1998, there was a viral epidemic affecting 171 people who had consumed shellfish harvested from shellfish beds along the East Shore of Tomales Bay. The California Department of Health Services traced the outbreak to a virus of human fecal origin and determined that one of the likely causes was substandard and potential failing septic systems.

III. FUTURE CORRECTIVE ACTIONS

On October 4, 2004, Marin County’s Public Health Officer issued a Declaration stating that there is an existing water pollution problem in the East Shore Community of Tomales Bay and that septic tanks are a source of the pollution. Marin County, in partnership with the East Shore community, has applied to the State Board for grant assistance under the 2004 Small Community Grant program to plan and construct a community wastewater collection and a waste treatment system for the local area. The County’s Community Development Agency would act as administrator of the grant and provide technical assistance until the community could obtain designation as a public sewage district or wastewater management zone. The County has already received funding to construct a community facility for a portion of the homes along the shoreline. This grant assistance application would provide for the entire community to upgrade its system.