

Resource Protection - Inadequate Wastewater Treatment in Coastal Areas.

Problem Statement

Community groups concerned with poor water quality in their nearshore local waters have brought the issue of inadequate wastewater treatment to MACZAC's attention. This is a severe problem statewide and even nationwide. According to a recent report from the Natural Resources Defense Council, 2004 was a record year for beach closings in the U.S. Nearly 20,000 closings and health advisory days were ordered in 2004 – a 9 percent increase from the previous year and the highest number since the organization began the tracking the problem 15 years ago. Although the increase is partly a function of improved monitoring of water quality, there is no doubt that water quality is a serious problem for recreational areas. Sources of the high levels of bacteria linked with human or animal waste contamination include a failure of aging or inadequate sewage treatment and high storm runoff from agricultural areas. Although it is difficult to sort out natural from human sources of bacteria used as indicators of sewage waste in Hawaiian waters, there are indications that cesspools are contributing to pathogens and nutrients in coastal waters, particularly where there are rapid groundwater pathways.

Public and private municipal sewage treatment plants in Hawai'i provide service to many residences, businesses, and public facilities within 1,000 feet of the coast. However, many homes and other facilities are served by cesspools or by improperly sited or maintained septic tanks. This is particularly troubling in important ecological, recreational, and food-gathering areas, such as the north shore of Oahu.

Properly sited and maintained septic systems by themselves often contribute little to most forms of ground/stream/coastal water pollution (nutrients, toxins and pathogens). There is, however, a big question about whether many systems are properly sited (e.g., in appropriate soil types with rational setbacks) and maintained. Programs have been established around the country to convert to centralized systems wherever possible, to upgrade all cesspools, and to closely monitor and maintain other existing individual wastewater systems.

Recommendations

MACZAC recommends creation of an interagency task force that can identify priority areas that need wastewater treatment upgrades, considering proximity to beach parks and impaired waters, as well as practicality. Upgrades should not be limited to large wastewater treatment plants; smaller systems and other types of solutions should be considered as well. Some ideas that merit consideration include:

- Voluntary guidelines for management of onsite and clustered (decentralized) wastewater treatment systems to help local governments strengthen their management of septic (onsite) systems and other small, privately-owned wastewater treatment systems.

- Revisions to DOH administrative rules regarding new Individual Wastewater Systems to ensure that they are adequate to protect water quality.
- Requirements for individual wastewater systems in certain areas to perform advanced treatment (i.e., to reduce the waste strength of the septic effluent measured in terms of biological oxygen demand, suspended solids, nutrients, and fecal coliform bacteria count) so that the effluent can be disposed of without adverse impact on the environment.
- Requirements for homes with cesspools to convert eventually to septic tanks
- Programs of long-term, permanent management of on-site systems, including a database for all the systems that are operating in the area, listing what type of system is in use and what the minimum maintenance requirement for the system.
- State or County imposed user-fees for septic tanks, similar to sewer fees charged for a central sewer system.
- Public education campaigns to “connect the dots” for people living with septic tanks and especially cesspools, concerning proper use and maintenance of the systems.
- Programs offering free inspection and subsidized or loan-available repair, upgrading, or replacement of failing cesspool or septic systems.