



Kihei Community Association

"E mālama pono" ...dedicated to protecting,
sustaining and enhancing our 'āina, kai and 'ohana

KIHEI COMMUNITY ASSOCIATION POSITION STATEMENT
ASSESSING WASTEWATER MANAGEMENT
JANUARY 2017 (rev. AUGUST 2018)

KCA is concerned about the handling and disposal of wastewater in South Maui. These concerns include damage to coastal waters, violation of the Clean Water Act, pathogens in swimming and fishing areas, nitrogen and phosphorus damage to the reefs, heavy metals and pharmaceuticals in ground water and coastal waters, and pathogens in inhabited areas due to irrigation.

Many of the homes in South Maui dispose of their wastewater in cesspools (a pit in the ground with no treatment). The effluent cause groundwater contamination and may leach into streams, drinking water wells and into the coastal waters. The regulation of these systems is the responsibility of the State Department of Health (DOH).

Some of the homes in South Maui have a septic system for disposal of sewage. These systems are also regulated by DOH. Poorly maintained systems have the same health and related problems as cesspools. Untreated sewage from cesspools and poorly maintained septic systems can harm public health and the environment.

The County is currently considering reducing the use of injection wells in South Maui by using the R1 treated wastewater for irrigation and re-vegetation of areas above the Pi'ilani Highway. The R1 wastewater treatment, properly performed, removes turbidity and almost all of the pathogens with ultra-violet light; however unknown quantities of nutrients such as nitrogen, harmful to the reefs and near-shore sea life, are still present after UV treatment. Unlike the West Maui injection wells, no studies have been performed to determine the quality and quantity of injection well wastewater reaching the ocean in South Maui.

The County requires new, large developments in South Maui that do not plan to connect to the County Wastewater Facility, to provide their own treatment plant. These plants would be regulated by the DOH. This is a concern as DOH does not have a history of regulation that adequately protects coastal waters. For example, DOH coastal water quality test results at Ma'alaea and at the Cove in Kihei dramatically exceed the state standards yet no action has been taken to address the issue or reverse this trend.

Toward the goal of proper wastewater disposal in South Maui, KCA's position is as follows:

1. Advocate that all new construction regardless of the zoning connect to an approved sewer line tied to a County or County approved treatment facility.

2. Advocate that within three years of sale, residential property tie into approved sewer lines to connect to a County or County approved treatment facility.
3. Advocate that within fifteen years all housing in South Maui tie into approved sewer lines to connect to a County or County approved treatment facility.
4. Advocate for use of R-1 water for landscaping within 100 feet of the County's R-1 distribution lines when not within 1000 feet of the coast and not used in densely inhabited areas.
5. Require new development that provides a private wastewater processing facility (unconnected to the County Waste Water system) to treat effluent to R-1 standards, eliminate pathogens with UV treatment, and provide use for landscaping and restoring vegetation when not within 1000 feet of the coast and not in densely inhabited areas. If development is within 1000 feet of the coast in inhabited areas the wastewater should be treated to potable standards.
6. Request that Maui County develop and annually publish a rolling ten-year plan to upgrade and extend the main and secondary wastewater lines.
7. Advocate for low cost loans and subsidies for the upgrade of existing substandard sewage disposal systems to tie into County approved treatment facilities.
8. Revise all zoning to require tying into a County approved sewage treatment facility.
9. The County should invest in treatment remedies to remove harmful substances from its wastewater including but not limited to nitrogen, phosphorus, heavy metals and pharmaceuticals.
10. KCA advocates for the following actions:
 - Continue to support the program in place that tests the South Maui coastal waters to determine their quality.
 - Advocate for a follow up study of pathogens at Cove Park and Kalama Park to determine the source and risks to human and marine life.

Facts and assumptions:

1. The state estimates that Maui County has over 12,000 cesspools.
2. Cesspools and poorly maintained septic systems do not treat sewage; they pollute the groundwater and may pollute drinking water, streams and the coastal waters. Access to potable water is scarce in Maui and reuse of wastewater for irrigation and other uses can reduce the demand. The reuse will reduce the drawdown of many of Maui's wells. These wells are planned to provide for our long-term supply of fresh water.
3. The sewage treatment facility in South Maui is capable of handling 8 million gallons of sewage a day. The existing peak flows are 4 million gallons a day. The plant has sufficient capacity handle

all of South Maui's present sewage treatment demand. The sewage collection system needs to be expanded to serve many areas not now served. While this is expensive, it would be the preferred method of wastewater disposal.

4. Many citizens of Maui cannot afford to properly treat their sewage. However, it is time that we advocate for a system that will not pollute our ground water and our ocean resources. Responsible government can no longer look the other way, as this appears to be a violation of the Federal Clean Water act, will damage tourism, and is a health hazard to our visitors and citizens of South Maui.
5. Cesspools and poorly maintained septic systems release nitrogen and phosphorus into the ground each day which can stimulate undesirable algae growth, degrade water quality and impact coral reefs.
6. Recent studies have indicated that South Maui has the poorest marine coastal water quality in the state.
7. The federal clean water act requires swimmable and fishable coastal waters. Injection wells and irrigating too close to the ocean with R1 wastewater may violate the Clean Water Act by high levels of nitrogen and phosphorus leaching into the coastal waters, which damage the reef, harm marine life and increase the life span of pathogens..
8. The County estimates it takes two years for the water from the injection well to reach the ocean, which is a distance of roughly 4000 feet. Using this as a guideline, the irrigation water treated to R1 standards was assumed to be safer if it was positioned 1000 feet from the coast rather than immediately adjacent to the coast. This would take the wastewater six months to reach the ocean and perhaps reduce the nutrients as it passes through the earth.
9. The 2016 DOH Guideline for use of R1 waste water on page 14 makes the following general statement in educating people near where wastewater is used for irrigation: There is a “**potential health hazard** arising from ingestion of or **contact** with recycled water”. Therefore, it does not seem advisable to use R1 wastewater in dense residential or condominium neighborhoods until it is declared safe by the DOH.