

»»» PROJECT UPDATE «««

# MĀ'ALAEA BAY WATERSHED MANAGEMENT PLAN



## WHAT IS A WATERSHED?

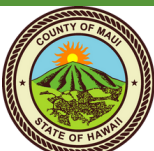
### »»» MAUKA TO MAKAI

A watershed is an area of land in which all sources of water discharge into a common waterbody such as a lake, river, stream, wetland, estuary, bay, or ocean. The types of activities, management measures, and practices that are conducted on the land within a watershed impact the quality of the receiving waterbodies. Maui's watersheds are unique in that they cover large tracts of land that include diverse changes in climate, geography, and land uses.

### WAIKAPŪ AND WAIAKOA «««

Reaching elevations of approximately 4,400 feet in the West Maui Mountains the Waikapū Watershed extends to the southeast and covers an area of 10,393 acres. The Waiakoa Watershed encompasses 35,331 acres, including the summit of Haleakalā at 10,023 feet. It extends northwest until its boundaries meet with the Waikapū Watershed. Both watersheds drain into Mā'alaea Bay, and ultimately, into the Pacific Ocean.

## MĀ'ALAEA BAY WATERSHEDS



# PURPOSE OF THE PLAN

## ➤➤➤ HEALTHY LAND = HEALTHY WATER

Land management plays an important role in maintaining healthy coastal waters. Coral reefs are important culturally, economically, and ecologically. Traditionally, the ocean is relied upon as a source of sustenance both physically and spiritually. Used for canoeing, diving, fishing, limu gathering, ceremonial purposes, and so much more, Native Hawaiians have a strong connection to the sea. Residents and visitors alike rely on the coastal waters for recreational opportunities, and commercially they support tourism enterprises. To manage the land is to protect the water, and all who live, work, and recreate within the watersheds will benefit from measures to reduce pollution.

The goal of the Mā'alaea Bay Watershed Management Plan is to identify the Critical Source Areas of pollution within the watershed and to provide best management practices that will protect the water resources within the planning area.

## ➤➤➤ IDENTIFYING SOURCES OF POLLUTION

Critical Source Areas are areas within a watershed that contribute a disproportionately large amount of pollutant load to a water body. According to the Hawai'i Department of Health (DOH) Final 2020 and Final 2022 Integrated Water Quality Reports, the coastal waters of Waikapū and Waiakoa watersheds are listed as impaired for several parameters including total nitrogen, nitrate+nitrite, ammonium, turbidity, and chlorophyll-a at one or more sampling locations. Sediment was determined to be the major pollutant of concern within the Waiakoa Watershed. Nitrogen is the major pollutant of concern in the Waikapū watershed. Critical Source Areas for sediment loading were identified as the highly denuded rangelands in the lower and middle portions of the Waiakoa Watershed. Within the Waikapū Watershed, Critical Source Areas of Nitrogen loading were identified to exist at both golf courses and the agricultural lands surrounding Keālia Pond.



# PROJECTS TO IMPROVE WATER QUALITY

**USING THE CRITICAL SOURCE AREAS DESCRIBED ABOVE AS WELL AS INPUT RECEIVED FROM THE COMMUNITY, PROJECTS HAVE BEEN DEVELOPED AND PRIORITIZED TO ADDRESS SOURCES OF POLLUTION.**

## ➤➤➤ COMMUNITY INPUT

Stakeholder concerns have included:

- Brown water events (Water Quality) including sediment, nutrients and pathogens
- Flooding impacts to traffic and businesses in North Kihei
- Debris clogging stormwater infrastructure and damaging roads
- Piles of sediment near waterways
- Wetlands being smothered by sediment
- Impervious surfaces
- Feral ungulates and erosion
- Fire hazards
- Cultural site protection/preservation
- Keālia Pond salinity and aquatic bird habitat

## WILDIFRES

The devastating August wildfires have highlighted the importance of land management. As community members, landowners, and policy makers work tirelessly on wildfire recovery, mitigation, and prevention, this Plan supports those efforts.

## ➤➤➤ NEXT STEP: PROJECT IMPLEMENTATION

Projects proposed in the plan are eligible for federal 319 funding from the Environmental Protection Agency. Management measures include feral ungulate control, wetland and riparian protection, fire prevention, road stabilization, reef friendly landscaping, erosion reduction, stormwater control, infrastructure improvements, stream restoration and more! Pull sheets that summarize costs, load reductions, permitting requirements, implementation timelines, and milestones have been developed for priority projects.

A draft version of the Mā'alaea Bay Watershed Management Plan can be found by clicking [HERE!](#)