

Name: Tova Callender

Agenda Item: B.1 Goal 2.4 | Mauka to Makai Watershed Management

Date Received: 2/1/23 at 4:57pm via email

2.4 Policy and 4.0 Action Suggestions, T Callender 2/1/2023

(new language in blue, strike for removed text)

2.4.5 | Gulches, specifically **Pohakea, Waikapu, Waiakoa, Kulanihako'i, Waipuilani, Waimahaihai, Lilioholo, Keawekapu, Wailea and Kapuakea**, as identified in the map in Figure 3.17 (pg. 106) of this Plan, must remain in open space and no new permanent structures, **with the exception of roadways and utilities**, may be developed in or within 100 feet of the top of the bank of identified gulches unless low-impact development strategies are implemented to prevent stormwater runoff.

2.4.6 | To reduce sediment loss and protect water quality, redevelopment and new development shall be encouraged to improve degraded areas by planting **ecologically advantageous non-invasive** or appropriate native plants.

2.4.8 | Encourage reestablishing historic hydrology and management of hydrologically connected systems where ~~appropriate~~ **possible**.

2.4.9 | Preserve and protect native coastal vegetation and coastal processes by:
b. Requiring all proposed shoreline developments to use **ecologically advantageous non-invasive** or native coastal vegetation in landscaping;
c. Encouraging dune restoration and native planting efforts, and limit irrigation **to plant establishment period**;

2.4.10 | Require new development and redevelopment to include **ecologically advantageous non-invasive** and native ~~and endemic~~ plants appropriate for the microclimate to conserve water, provide shade, beauty, and reduce sediment runoff. All new landscaping must minimize irrigation needs.

2.4.12 | Protect and preserve open space areas as important assets of the region. Habitat connectivity for native species, watersheds, undeveloped shoreline areas, **wetlands** and other environmentally **and culturally** sensitive areas will be preserved.

2.4.13 | Require the implementation of low-impact development **or permaculture** design practices in developments in South Maui to reduce stormwater runoff and protect water quality. ~~Encourage~~ **Require** management of flows that are greater than the five-year storm event to retain, filter, and sink as much stormwater **and remove pollutants** through low-impact design **or permaculture** design as feasible on site.

MOVE TO PARK SECTION? **2.4.14** | Encourage the provision of public restrooms in major parks and public spaces and explore implementing composting toilets.

Additional policy suggestions:

Require update of County drainage standards to include provisions supporting permaculture design techniques.

Actions 4.0

4.02 Update the Kīhei Drainage Master Plan for flood prevention and coastal water quality protection and sensitive ecosystems management in South Maui. Update the plan with the findings presented in the Ecological Alternatives Analysis prepared by EcoSolutions LLC (2020). Take into account the impacts that upland development have downstream. Prioritize green infrastructure and low impact development where feasible. [Implement the recommendation from the Southwest Maui Watershed Plan](#).

~~**4.03**~~ (MS4 program described here is trigger by a population threshold)

4.06 Provide resources for upland forest conservation, invasive species control, and restoration projects to improve forest cover and functions, and reduce downstream flooding. [Protect soils and mitigate erosion through feral ungulate fencing and invasive species control and management](#)

New Action under Runoff and Drainage

[Develop concept for regional stormwater park in collaboration with County Parks, DPW, large landowners and the community.](#)

Under Restoration Add:

- Support the protection and rehabilitation of riparian zones with feral ungulate fencing and native plants.

[Accelerate funding for R-1 reuse on the landscape to mitigate for axis deer damage, recharge depleted aquifers, and provide forage for livestock \(local food security\).](#)

4.16 Leverage existing erosion and sea level rise studies to develop and implement localized beach management and coastal adaptation plans [including managed retreat](#).

Additional action suggestion:

[Form a committee to coordinate between South Maui and Upcountry in managing Watersheds and long-term planning.](#)