March 20, 2017

BEACH MANAGEMENT PLAN RECOMMENDATIONS AND ACCOMPLISHMENTS

(Recommendations in red are accomplished or in process)

1. Development of individual management plans for each shoreline segment

   1.1a) Sponsor a study to develop a shoreline assessment model to classify shoreline segments based on factors such as extent of upland development, recreational opportunities, cultural significance, environmental quality, and water quality.

   1.1b) Develop individual (littoral cell) management plans for each of Maui's shoreline segments that take into consideration the factors mentioned in 1.1a).

2. Guidelines for Shoreline Protection Measures

   2.1a) Encourage hazard avoidance in the form of retreat or relocation where possible.

   2.1b) Establish a procedure for determining allowable shore protection measures.

   2.1c) Develop a study to provide technical recommendations for the restoration of sandy shorelines through beach nourishment.

   2.1d) Provide suggestions on alternative coastal protection designs where beach nourishment is not feasible.

   2.1e) List acceptable structures for emergency (temporary) coastal protection

   2.1f) Determine suitable time limits for emergency shore protection measures and ensure that all emergency permits include a time limit and a description of the penalty for failure to remove the temporary shore protection measures by the time limit.

   2.1g) Require compensatory mitigation where lateral access and/or beach resources are lost or impounded by development.

   2.2a) Establish a critical parcel purchase program to purchase eroding coastal properties that are sand sources for valuable public beach areas.

3. Sea-level rise

   3.1a) Provide funding for the creation of high-accuracy LIDAR-based sea-level rise inundation maps for Maui's low-lying coastal areas.

   3.1b) Take sea-level rise into consideration when reviewing development or redevelopment of low-lying and coastal areas.

   3.1c) Identify critical infrastructure at risk of sea-level rise inundation and develop relocation plans for this infrastructure.

   3.1d) Identify communities and developments at risk of sea-level rise inundation and develop long-term plans to address the associated issues of a rising water table including drainage and leach field failure, flooding, wetland formation and salt-water intrusion into aquifers, as well as coastal erosion and increased susceptibility to damage from storms, hurricanes, high surf and tsunami.

   3.1e) Encourage and support open space, conservation easements, and decreased development density in low-lying coastal areas.

6.1k) Conduct workshops for landscape designers and landscape maintenance personnel, in particular for resorts and golf courses, on ways to create landscape design and maintenance plans that minimize the need for irrigation, fertilizers, pesticides and herbicides.

7. Shoreline Setbacks and Coastal Erosion Hazard Data

7.1a) Continue to fund updates to Maui's annual erosion hazard maps every 5 to 10 years.

7.1b) Develop a study to determine high hazard areas for hurricane and tsunami impacts, and incorporate this information into shoreline setback determination, to be no further makai than measured by existing methods.

7.1c) Incorporate performance standards (e.g., construction style and estimated lifetime of structure) into the determination of shoreline building setbacks, to be no further makai than measured by existing methods.

7.1d) Develop a study of coastal bluff erosion for bluff properties that have been developed and will potentially be developed in the future.

7.1e) Develop interim policies for setback requirements on coastal bluff properties.

7.1f) For sandy shorelines, increase Maui's shoreline setbacks to 70 times the erosion rate plus a 40-foot buffer for already developed residential lots; to at least 250 feet for undeveloped lots with smaller commercial/residential projects; and to at least 400 feet for undeveloped lots with large commercial projects.

7.1g) Amend both the county's Special Management Area (SMA) Rules and Shoreline Rules to extend county jurisdiction to the ocean.

7.1h) Establish a rule and/or ordinance that no certified shoreline shall be located makai of the previous shoreline.

7.1i) Protect accreting lands with a permanent ban on seaward extensions of any improvements other than minor structures permissible under the shoreline rules of the Maui Planning Commission.

8. Proactive Development of Coastal Lands

8.1a) Encourage developers and landowners to pre-consult with various experts and governmental agencies familiar with coastal erosion in order to get appropriate recommendations on project design.

8.1b) Adopt the recommendations made in the Hawaii Coastal Hazard Mitigation Guidebook for coastal planning and development, and provide these recommendations to developers.

8.1c) Make the Beach Management Plan for Maui available to developers, contractors, and landowners as a reference guide.

8.1d) Encourage greater setbacks for large structures such as hotels and condominiums, and slab-on-grade structures.

8.1e) Discourage slab-on-grade construction for coastal properties.

8.1f) Encourage minor structures to be non-permanent and portable.

8.1g) Encourage developers to construct building additions on the mauka side of the structure.

8.1h) Add to best management practices a requirement that lot depth be maximized to avoid shallow oceanfront subdivisions. A minimum 500 ft lot depth should be required in new subdivisions.

8.1i) All new subdivisions and major redevelopments shall restore any existing or recent coastal dune systems to specified standards.

12.1c) Sponsor a study on the incorporation of the impacts of episodic events such as hurricanes and tsunami into shoreline setbacks.
12.1d) Sponsor a study on bluff erosion.
12.1e) Sponsor a study on sea-level rise inundation hazard areas.
12.1f) Sponsor a study on locating offshore sand resources with potential for beach replenishment.
12.1g) Encourage Maui Community College to take a more active role in marine science education and research by further developing its Marine Option Program.
12.1h) Seek participation in research on marine issues from other universities, ocean user groups, and other government agencies.
12.1i) Create a Maui Environmental Research Fund with funds generated by a combination of new development projects, tourism, and major resource users.
12.2a) Update the County's database of coastal aerial photographs at least every five years and no longer than every 10 years so that county planners can make informed decisions with reasonably up-to-date information on shoreline development.
12.2b) Help support the continued collection of data on water quality and algal blooms.

13. Funding Mechanisms

13.1a) Allocate a portion of the annual budget to a dedicated beach management fund, which would be used for land banking, shoreline access and beach and dune restoration projects as well as continued coastal zone research and monitoring.
13.1b) Pass an ordinance to direct revenue from fees, fines, penalties, regular as well as after-the-fact SMA and shoreline permits, violations and county-initiated settlement agreements to a revolving fund for coastal land acquisition and beach, dune, and shoreline access restoration.
13.1c) Identify strategies for generating more revenue earmarked for beach management.
13.1d) More effectively pursue matching funds from outside agencies.
13.1e) Conduct a pilot beach mitigation banking program pursuant to HRS 205A to provide a market-based mechanism that compensates the public for lost shoreline access on impaired coastlines by purchasing publicly-valued, intact sandy shorelines for long-term conservation and public use.
13.2a) Build relationships with and between non-governmental, community and environmental groups to raise funds, coordinate land acquisition, and carry out coastal research and monitoring.
13.2b) Support and recognize volunteer efforts of non-governmental, community and environmental groups who are active in coastal stewardship.