

Suggested Policies and Actions Ready and Resilient Systems

Policies

Climate Change and Sea Level Rise

The State-recognized sea-level rise exposure area (SLR-XA) ~~refers to~~ is defined as the State Climate Commission's recognized planning target or threshold for sea-level rise exposure. Currently, the recognized planning threshold is 3.2-feet of sea-level rise. The planning threshold may change based on best available scientific information.

The Erosion Hazard Line is defined as the County of Maui recognized planning target or threshold for coastal erosion. The County's recognized planning threshold for coastal erosion is 3.2-feet of sea level rise as identified in the Hawaii Sea Level Rise Viewer (Coastal Erosion). The planning threshold may change based on best available scientific information.

(Definitions to be included in introductory section of Goal 2.1 Ready and Resilient Systems.)

1. Reserve existing golf course facilities as future receiving areas to transfer existing shoreline development that is impacted by sea level rise and coastal hazards.

Option 1: Reserve existing golf course facilities as potential future receiving areas to transfer shoreline development that is impacted by sea level rise and coastal hazards in Kā'anapali.

Option 2: Proposed Community Plan Amendments for new development on existing golf course land in Kā'anapali ma kai of Honoapi'ilani Highway should be approved only for existing shoreline development that is retreating inland because of impacts from sea level rise or other coastal hazards.

(CPAC marked for revisit for Dec 17 meeting and Growth Framework Maps.)

2. In order to minimize impacts from future coastal erosion, new permanent structures shall be located landward of the Erosion Hazard Line for 3.2 feet of sea level rise except a minimum buildable area shall be provided to allow for reasonable development. (CPAC marked for revisit for Dec 17 meeting) ~~In order to minimize impacts from future coastal erosion, new structures on shoreline parcels shall be located outside of the State-recognized erosion hazard line for 3.2 feet of sea level rise.~~
3. For redevelopment and new developments within the State-recognized SLR-XA, developers shall proactively:
 - a. Coordinate with the Maui County Planning Department and adjacent or near-by property owners to understand possible collective re-location of at-risk structures, and

- b. Incorporate results of coordination into development plans by siting any new planned structures out of harm's way.
4. Prioritize projects that provide multiple benefits from resilience actions.

Fire and Emergency Management

5. Support the goals, objectives, and actions of the Western Maui Community Wildfire Protection Plan and the Maui County Multi-Hazard Mitigation Plan Update.
6. Require all developments to incorporate defensible space around structures and communities and ongoing maintenance of defensible space.
7. Require community buildings that will serve as emergency shelters to be built or retrofitted to hurricane standards.

Water

8. Require public and private water purveyors to coordinate water development in order to optimize pumpage, mitigate saltwater intrusion, prevent impacts to streams, and preserve regional resources.
9. Require new developments to install landscaping that reduces water use, using drought resistant and micro-climate appropriate design and plants, and use greywater where the State Department of Health allows it.

Wastewater

10. New developments in West Maui shall connect to County or private recycled water distribution systems when available; if reuse is not readily available, developments shall be designed to allow for future connections.

Actions (Lead County Agency)

Climate Change and Sea Level Rise

1. Conduct a detailed vulnerability assessment of all existing County infrastructure and facilities in West Maui that are within the State-recognized SLR-XA, and subject to other coastal hazards. Coordinate with the State on key State infrastructure and facilities such as highways and schools. (CIP Coordinator)
2. Conduct a feasibility study on managed retreat of at-risk development in West Maui, to include an analysis of alternatives and interim steps to achieve managed retreat, identify incentives for proactive retreat, and develop programmatic environmental documents to assist in implementing managed retreat. (Planning)
3. Establish special improvement districts and community facilities districts as appropriate for areas threatened by coastal hazards in West Maui. (Planning)

4. Create and implement beach management plans for beach cells in West Maui and fund any necessary environmental assessments. (Planning)
5. Prepare and implement an acquisition strategy for parks in West Maui, considering the potential for sea-level rise and climate change. (DPR)
6. Integrate the State-recognized SLR-XA into West Maui capital improvement planning for all County departments and public facilities. (CIP Coordinator)
7. Fund additional sea-level rise exposure modeling, incorporating local data, for six feet or more of sea-level rise to use in vulnerability assessments of critical infrastructure and facilities. (Planning)
8. Work with the State Department of Health Clean Water Branch to identify next steps in addressing the impact of sea-level rise on on-site disposal systems (i.e., cesspool and septic systems) and develop remediation plans. (DEM)
9. Develop an inventory of natural and cultural resources and practices impacted by sea-level rise along with preservation plans. (Planning)
10. Evaluate shoreline access locations to be impacted by sea-level rise, identify solutions to preserve shoreline access. (Planning)
11. Propose amendments to the Special Management Area (SMA) boundaries to account for sea-level rise and other hazards, as well as other SMA criteria. (Planning)
12. Adopt siting and design standards to enhance resilience in public housing and affordable housing projects. (DPW)

Fire and Emergency Management

13. Develop a wildfire information campaign with signage to build public awareness of wildfire hazards. Improve community awareness of the human, economic, and environmental costs associated with wildfires caused by negligence or accident. Engage the community to create and maintain fire breaks, and to consider native dryland plants in landscaping in the drier areas of West Maui. (MFD)
14. Propose amendments to the Maui County Code to require developments to incorporate defensible space around structures and communities and require ongoing maintenance of defensible spaces. (DPW)
15. Propose amendments to the Maui County Code to require landowners of large vacant land in high fire hazard areas to prepare and carry out a fuel management plan and ensure it will not impact historic properties. (DPW)

16. Build a new fire station along Honoapi'ilani Highway, south of Lahaina, to address increased call volume and improve response time in that area. (MFD)
17. Develop a plan to provide fire protection for homes on kuleana lands. (MFD)
18. Develop a community-based disaster preparation plan. (MEMA)
19. Develop a long-term post-disaster recovery and reconstruction plan for West Maui. (Planning)
20. Annually fund maintenance of a GIS database of all emergency management infrastructure and collection of post-incident monitoring data. (ITS)
21. Identify additional emergency shelter facilities that include storage of supplies and are located in the safest identifiable areas given the risk of natural or manmade disasters. (MEMA)
22. Identify additional emergency evacuation routes to access West Maui and isolated neighborhoods. (MEMA)
23. Plan and build fire breaks and bioswales that can be used for recreational paths and greenways around existing development and between new developments. (MFD)
24. Develop and implement a more robust communication system during emergencies. (MEMA)
25. Develop a resiliency hub appropriate for the West Maui community. (Mayor's Office)
26. In the event of an emergency, alert the public of dangerous road conditions, closures, hazards, or disasters by implementing appropriate safety measures such as temporary staging of electronic messaging signs on either side of the Pali, near DT Fleming Beach Park, and in Waihe'e. (MPD)
27. Identify and implement appropriate safety improvements such as traffic controls in improving Kahekili Highway and Honoapi'ilani Highway for use as an alternate route for West Maui during times of emergency. (MPD)
28. Identify and implement temporary safety measures such as signage and lane shifts to alert the public of dangerous road conditions due to sea level rise and climate change. (DPW, HDOT)
29. Preserve and maintain existing reservoir and water storage infrastructure within West Maui for fire protection capabilities and agriculture uses. (CIP Coordinator)

Water

30. Develop basal groundwater sources in West Maui to timely serve planned population growth and offset decreased surface water diversions. (DWS)
31. Improve interconnection between Department of Water Supply subsystems in West Maui. (DWS)
32. Develop contingency agreements between County and private water purveyors in West Maui. (DWS)

Wastewater and Solid Waste

33. Identify potential new users of recycled water and expand recycled water storage and conveyance systems in West Maui to increase the reuse of recycled water. (DEM)
34. Study and implement other disposal means to strive to eliminate the use of underground injection control wells and transition from the use of wastewater injection control wells to appropriate environmentally sound methods of wastewater disposal and promote beneficial use of wastewater effluent. (DEM)
35. Improve odor control at the Lahaina Wastewater Reclamation Facility and pump stations. (DEM)
36. Propose amendments to the Maui County Code to allow for more use of greywater for approved purposes in West Maui. (DEM)
37. Identify a location and develop a transfer station for disposal/recycling of regulated (EPA and DOH) materials such as appliances, e-waste, tires, and lead-acid batteries. (DEM)

Drainage and Stormwater

38. Update the Lahaina Town Drainage Master Plan with consideration to low impact development solutions and develop an implementation plan. (DPW)
39. Support the implementation of flood control projects and siltation basins mau ka of Honoapi'ilani Highway, including the remaining phases of the Lahaina Watershed Project, to address problem areas. (DPW)
40. Maintain a current inventory of drainage facilities in West Maui for use in developing long-term plans for addressing stormwater issues. (DPW)
41. Improve stormwater management systems along Lower Honoapi'ilani Road to minimize stormwater runoff to the ocean. (DPW)
42. Prioritize regular maintenance and clearing of sediment basins in West Maui. (DPW)

43. Implement the County's Storm Water Management Program in West Maui with consideration to low impact design objectives. (DPW)
44. Educate the public on existing policies related to maintenance of drainageways. (DPW)
45. Create open space in areas sensitive to flooding and around the native forests as a protective buffer both for the forest and development. (Office of Mayor)
46. Propose amendments to the Maui County code to require permeable surfaces or other low impact development standards to be used in new or redeveloped parking lots and streets to mitigate runoff and help with groundwater recharge. (DPW)
47. Develop guidelines and incentives for landowners, both large and small, to retain stormwater runoff and include ~~have~~ more permeable surfaces on their property. (DPW) (CPAC marked for revisit for Dec 17 meeting)