

2.3 Goal | Ready and resilient systems.

Why is it important?

Infrastructure systems perform essential services that provide for the everyday needs of residents and visitors. Water treatment facilities provide clean drinking water to homes and businesses. Wastewater treatment systems process wastewater. Flood and drainage facilities help convey rainfall flows to reduce flood risk to the community. The transportation network connects people to their places of work, shops, schools, parks, and other locations. These systems are vitally important as they affect residents' quality of life and the health of the environment.

Maintaining and improving infrastructure systems is important in the face of increased demand and threats from natural and human-made hazards. As both the population of residents and visitors to South Maui increases, added pressure and demand will be placed on these systems as well as South Maui's resources. Hazards such as flooding and coastal erosion threaten the low-lying coastal areas that comprise much of South Maui. The dry climate of South Maui means that drought and wildfire are also serious concerns for the community. These potentially damaging impacts are expected to worsen with climate change and sea level rise.

As we plan for the next 20 years and beyond, responsible management of our infrastructure systems will be key to meeting the needs of the community and improving the quality of life. By identifying and carrying out strategies that will help South Maui mitigate the impacts from natural hazard events and adapt to climate change, the result will be a more resilient and self-sustaining community that can respond to and recover from disasters and stressors.

How will setting this goal affect our future?

With this goal, South Maui is committed to supporting improved infrastructure systems for an adaptive and resilient community that meets the needs and fosters responsible stewardship of South Maui's infrastructure systems.

Definitions

The following terms are used throughout the Plan, and it is important to understand their definitions and use for planning.

The State-recognized **sea level rise exposure area (SLR-XA)** is defined as the Hawai'i Climate Change Mitigation and Adaptation 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 over time based on best available scientific information.

The **Erosion Hazard Line** is defined as the County of Maui's 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 Hawai'i Sea Level Rise Viewer (Coastal Erosion, <https://www.pacioos.hawaii.edu/shoreline/slr-hawaii/>). The planning threshold may change over time based on best available scientific information.

Cross-cutting topics:

- Climate change and Resilience
- Cultural Resources
- Hazards
- Historic Preservation
- Infrastructure
- Land Use
- Environment
- Emergency Services
- Other Services and Facilities

Policies

Climate Change and Sea Level Rise

2.3.1 | To minimize impacts from future coastal erosion to development, new permanent structures must be located landward of the State-recognized sea level rise exposure area (SLR-XA) with coastal erosion, except a minimum buildable area must be provided. This restriction does not apply to structures needed as part of an approved beach restoration project or cultural project such as loko i'a, ~~and~~ which must be evaluated on a case-by-case basis.

2.3.2 | For redevelopment and new developments within the SLR-XA, developers must:

a. Proactively coordinate with the Maui County Planning Department and adjacent or nearby property owners to understand possible collective relocation options for at-risk structures;

b. Incorporate results of coordination into development plans by siting any new planned structures out of harm's way;

~~c. Not hold the County of Maui and State of Hawai'i liable for any and all future costs associated with maintaining or protecting the property developed within the SLR-XA, including costs associated with retreat, hazard mitigation, and cleanup costs to maintain the health of the nearshore marine environment from material debris originating from the ocean or from the structures' own deterioration or failure; and~~

~~d. Recognize that permit approvals from the County of Maui will be conditioned to prohibit future shoreline hardening for their property or project.~~

2.3.3 | Protect the [public](#) access to and [preserve and restore the](#) ecological function of wetlands, shorelines, beaches, and dunes by preserving waterfront land within the SLR-XA as undeveloped space, greenways, stormwater management facilities, [active restoration areas](#) or parks wherever possible.

2.3.4 | Support amendments to the Maui Island Plan and Community Plan, and changes in [Z](#)oning for new development in Mā'alaea on land mauka of Hauoli Street and the SLR-XA for [existing affected](#) makai development retreating inland because of impacts from sea level rise or other coastal hazards.

2.3.5 | Support coastal retreat of South Maui structures currently located in the shoreline setback area and the SLR-XA.

2.3.6 | Encourage redevelopment and new development related to strategic relocation and increased resilience in preparation for and in response to climate change or natural disasters.

2.3.7 | Avoid development or redevelopment within Special Flood Hazard Areas (SFHA).

2.3.8 | Support expansion of community-supported renewable energy deployment, including small-scale community options [and decentralized energy systems](#), all of which include plans for maintenance and disposal that do not burden County landfills and decommissioning at the end of the project's intended use [as well as safeguarding our endangered flora and fauna](#).

[Added by CPAC | Sand should not be moved between moku without consulting with Native Hawaiian Organizations and/or cultural practitioners from the South Maui district.](#)

Fire and Emergency Management

2.3.9 | Require all development to incorporate defensible space around its perimeter and provide ongoing maintenance as per recommendations of the Maui Fire Department.

2.3.10 | Improve the resilience of the transportation system to natural hazard events and climate change-related hazards such as sea level rise, flooding, ~~and~~ wildfires, [thunderstorms and tsunamis](#), including the development of additional roadways in and out of South Maui to improve safe evacuation during hazard events.

2.3.11 | Consult and apply ~~as appropriate~~ the goals, objectives, and actions of the South Maui Community Wildfire Protection Plan and the Maui County Multi-Hazard Mitigation Plan Update.

2.3.12 | Encourage the development of fire breaks and bioswales that can be used for recreational paths and greenways around existing communities, and between new and existing communities.

2.3.13 | Require new buildings that serve as emergency shelters to be built to hurricane standards and support existing buildings that currently serve as emergency shelters to be retrofitted to Enhanced Hurricane Protection Area standards.

Water

2.3.14 | Require new developments to install landscaping that reduces water use with drought-resistant and micro-climate appropriate design, [overstory trees to reduce evapotranspiration](#), and plants emphasizing native species. Use water catchment systems to support irrigation, and gray water where [available and](#) allowed by the State Department of Health.

2.3.15 | [Prioritize above all else](#) ~~Support~~ the protection, preservation, and management of South Maui's water sources, including aquifers, recharge areas, and watershed's [springs](#).

Wastewater

2.3.16 | New developments in South Maui, including projects developed under Chapter 201H, Hawai'i Revised Statutes, and Chapter 2.96 and 2.97, MCC, must connect to County or private recycled water distribution systems when available; if recycled water infrastructure is not readily available, developments shall be designed to allow for future connections.

2.3.17 | ~~Support~~ Require the use of gray water and recycled water in County parks and community gardens when legal and safe.

2.3.18 | Support amendments to the Maui Island Plan and Community Plan, and changes in Zoning, for the acquisition of land outside of the SLR-XA for the construction of a new wastewater collection system and treatment options to serve the Mā'alaea area.

2.3.19 | ~~Support the transition of the Mā'alaea area away from the use of wastewater injection wells to a new system that increases treatment and provides better options for reuse or disposal of wastewater.~~ Eliminate the use of wastewater injection wells in Mā'alaea through the transition to the new system that increases the disinfection level and treatment capacity to provide better options for the reuse or disposal of wastewater.

Added by CPAC | Eliminate the use of wastewater injection wells in South Maui to reduce ocean pollution by expanding the recycled water distribution system infrastructure and increasing the quality of disinfection.

Added by CPAC | Support better utilization of R-1 water via innovative techniques such as efficient distribution systems, scalping facilities, natural earth filtering systems, and recycled water storage ponds and lagoons.