

Guide to Coastal Hazard Adaptation Strategies Suitable for Hawaii's Coastlines

Resource Link: [Hawaii'i Coastal Adaptation Strategies \(arcgis.com\)](https://arcgis.com)

The **Guide to Coastal Hazard Adaptation Strategies Suitable for Hawaii's Coastlines**, is a new, comprehensive resource that identifies a range of coastal adaptation strategies suitable for Hawaii'i, and outlines the considerations and regulatory framework that may apply to the implementation of various adaptation strategies.

Background

Hawaii's coastlines face chronic erosion and flooding from sea level rise. To protect the beaches, which are considered a public trust, Hawaii'i coastal zone management law prohibits the use of seawalls and revetments on sites with beaches, unless it is clearly in the interest of the public. While this rule preserves beach ecosystems, it has left many shoreline residents and planners unclear about what coastal adaptation strategies are available to protect existing development.

Besides shoreline hardening, dune restoration and beach renourishment are common strategies used in Hawaii'i today. However, due to Hawaii's diverse coastline, these strategies are not appropriate in all situations. Hawaii's coastal areas are varied in geology, uses and development. These characteristics affect the vulnerability of coastal areas and underscore that there is no "one size fits all" solution.

Overview of Resource

This informational resource **identifies over 40 adaptation strategies that could be suitable for Hawaii's coastlines to protect from coastal hazards** such as erosion, storm flooding, wave impact forces and sea level rise flooding. Strategies range from gray (built structures) to green (nature-based) solutions and includes strategies applicable for parcel and regional scale needs.

Each strategy includes information on advantages and disadvantages, relative cost for implementation and maintenance, ideal scale and site conditions, as well as potential permits that may be required.

The resource features a **central website** with links to an **Adaptation Strategy Matrix**, Adaptation Strategy **Info Cards**, an **interactive map** of coastal adaptation projects implemented across the State of Hawaii'i, and **links to agencies with responsibilities to issue permits and approvals** relevant to various adaptation strategies.

This resource presents the complex issue of coastal adaptation in an easily accessible format that is digestible for all audiences, including those that are new to, or unfamiliar with, coastal processes and/or the regulatory system. Users of the resource will learn the range of options available, the pros and cons of each, and the permitting processes needed to implement them. The intended audience includes shoreline homeowners and residents, planners, engineers and developers, and legislators.

The information in the resource reflects the most common scenarios. **Permitting and suitability will be specific to a location, and place-based considerations must be included when determining the most appropriate adaptation strategy.**

To learn more:

- Contact the Hawaii'i CZM Program at dbedt.op.czm@hawaii.gov or 808-587-2846
- Visit the Hawaii'i Ocean Resources Management Plan website at <https://ormp.hawaii.gov/>