

A BILL FOR AN ORDINANCE ESTABLISHING A NEW ARTICLE 27,
CHAPTER 8, KAUAI COUNTY CODE 1987,
RELATING TO SHORELINE SETBACK AND COASTAL PROTECTION

BE IT ORDAINED BY THE COUNCIL OF THE COUNTY OF KAUAI, STATE OF HAWAII:

SECTION 1. Findings and Purpose. The Council finds that Kauai's coastline is subject to a wide variety of natural hazards, such as tsunamis, high surf, sea level rise, hurricanes, coastal flooding, and coastal erosion that pose dangers to people and property located near the shoreline. Proper siting of structures based on hazard recognition and long term planning principles is critical to the protection of life and property, the mitigation of coastal hazards, and the preservation of coastal resources. Furthermore, the Planning Department is in the process of producing coastal erosion hazard maps that will be used as a basis for new shoreline setback requirements. Current shoreline setback requirements were established without adequate data on historical shoreline positions and trends. Development and other improvements on coastal lands have occurred without regard to erosion hazards. Because chronically retreating shorelines eventually threaten these improvements, there has been widespread construction of shore protection structures such as seawalls and revetments. These structures distort the natural shoreline environment, often leading to accelerated erosion on adjoining properties, beach loss, and reduced public access. This pattern of coastal zone development seriously degrades the natural attributes of the Kauai coast as documented in the Kauai Shoreline Erosion Management Study (September, 1990).

The shoreline environment is one of Kauai's most important economic and natural resources. Kauai's beaches provide scenic beauty and recreational opportunities for residents and visitors. They are culturally important to the people of Hawaii. Beaches, dunes, and offshore topographic features also help to minimize risks from coastal hazards by dissipating wave energy, which could otherwise cause significant damage to coastal property. Beaches provide important habitat for seabirds, turtles, monk seals, and other animals and plants. In all of the abovementioned ways, beaches and coastal areas are part of the public trust, and it is government's fiduciary responsibility to protect beaches and coastal areas.

It is important that information regarding natural hazards such as coastal erosion data be incorporated into the planning process at the earliest stages of development, i.e., at the time of zoning, general plan, and development plan changes before lot sizes and shapes are established, so as to give landowners more environmentally sound options and to save decision makers from the agonizing dilemma of choosing between protection of one owner to the detriment of another owner and/or the public.

In order to protect life, property, and coastal resources against coastal hazards, this bill sets forth a procedure for establishing building setbacks from the shoreline based on scientifically documented rates of shoreline change and the history of coastal hazards in a specific place. Using a precautionary approach, the bill promotes proper siting of structures and reduced use of the shoreline setback area for structures in order to ensure the longevity and integrity of Kauai's coastal

and beach resources. Additionally, it imposes stiff penalties for structures illegally built or illegally repaired within the shoreline setback area from the effective date of this ordinance.

The ongoing coastal erosion study by the Planning Department will provide a public database to assist the Planning Department and shoreline setback area owners in this regard. Until the public data base is established, landowners will be allowed to site improvements by developing their own data through scientifically accepted methodologies specified herein. This bill serves as an interim measure until the public database of science-based erosion rates is formally established and new setback rules and ordinance are adopted by the Planning Commission, County Council, and Mayor, as appropriate.

The County is authorized to protect the coastal area pursuant to Public Law No. 92-583, as amended, ("Coastal Zone Management Act"), Chapter 205A, Hawai'i Revised Statutes, as amended, ("Shoreline Protection Act"), Article XI Section 1 of the Hawai'i State Constitution, Public Law 92-583, and the County's police powers to protect public health and safety. This ordinance shall be known as the "Shoreline Setback and Coastal Protection Ordinance."

SECTION 2. Chapter 8 of the Kaua'i County Code 1987 is hereby amended by adding a new article to be appropriately designated and to read as follows:

"ARTICLE 27. SHORELINE SETBACK AND COASTAL PROTECTION

Sec. 8-27.1 Applicability. This Article shall be applicable to all lands within the County of Kaua'i, State of Hawai'i, that are (a) abutting the shoreline, or (b) located within five hundred (500) feet of the shoreline unless the applicant can demonstrate to the satisfaction of the Director that the applicant's proposed improvement will not be affected by coastal erosion or hazards, excluding natural catastrophes. Factors to be considered shall include, but not be limited to, proximity to the shoreline, topography, properties between the shoreline and applicant's property, elevation, and the history of coastal hazards in the area.

Sec. 8-27.2 Definitions. For purposes of this article, unless it is plainly evident from the context that a different meaning is intended, certain words and phrases used herein shall be defined as follows:

"Adversely affect beach processes" means to pose a potential immediate or future adverse effect on beach processes as a result of a structure or activity located within the coastal erosion hazard zone, or to create an immediate or future need to artificially fix the shoreline.

"Annual coastal erosion rate" means the annual rate of coastal erosion calculated by following a procedure established in the Hawai'i Coastal Hazard Mitigation Guidebook, (January 2005), which was prepared for the State of Hawai'i, Department of Land and Natural Resources, Coastal Zone Management Program, University of Hawai'i Sea Grant College Program and the Pacific Services Center and Coastal Services Center of the National Oceanic and Atmospheric Administration at section 4.1.

"Average lot depth" means the measurement obtained by adding the lengths of the two sides of a lot which are at or near right angles with the shoreline, or the seaward boundary of the lot that runs roughly parallel to the shoreline if the property is not abutting the shoreline, to the length of a line obtained by drawing a line from a point in the center of the makai side of the

lot to a point in the center of the mauka side of the lot and dividing the resulting sum by three. For irregularly shaped lots including flag lots, triangular parcels, lots on peninsulas, and/or lots having ocean on two or more sides of the lot, the average lot depth will be determined by the Director.

“Board” shall mean the Board of Land and Natural Resources, State of Hawai‘i.

“Building footprint” shall mean all parts of a main building (excluding roof overhangs) that rest, directly or indirectly, on the ground, including those portions of the building that are supported by posts, piers, or columns. Building footprint also includes attached garages, covered carports, bay windows with floor space, lanais, decks, cantilevered decks, spas, and in-ground swimming pools.

“Certified Shoreline” means the shoreline established by Board pursuant to HRS 205A-42, as amended.

“Coastal Dune” means one of possibly several continuous or nearly continuous mounds or ridges of unconsolidated sand contiguous and parallel to the beach, situated so that it may be accessible to storm waves and seasonal high waves for release to the beach or offshore waters.

“Coastal erosion” means the natural loss of coastal lands, usually by wave attack, tidal or littoral currents, or wind. Coastal erosion is synonymous with shoreline retreat.

“Coastal erosion hazard zone” shall include all of the land between the shoreline and the shoreline setback line.

“Coastal erosion study” means a quantitative study of historical shoreline behavior utilizing orthorectified aerial photographs or other imagery to carry out high-resolution mapping of historical shoreline positions to obtain a statistically valid annual erosion rate of the Shoreline Change Reference Feature (SCRF) and vegetation line. The coastal erosion study shall be carried out by a qualified professional consultant as defined in this article following procedures described in Section 4.1 of the Hawai‘i Coastal Hazard Mitigation Guidebook, (January 2005). The coastal erosion study shall include but not be limited to:

- (1) Mapping of the historical shoreline positions including both the SCRF and the vegetation line for the subject parcel, as well as the local and regional littoral cell;

- (2) The method resulting in the larger erosion rate (SCRF/toe of beach vs. vegetation line) shall be used to establish the erosion rate unless there is clear evidence to indicate another method is a more accurate representation of historic shoreline change.

- (3) Uncertainty or error calculation of the data and the annual erosion rate;

- (4) Additional information relevant to the erosion study shall include: a current certified shoreline survey, construction plans, if any, existing and finished contours; photographs of the shoreline setback area, analysis of the coastal erosion rates and shoreline processes.

- (5) Where a coastal erosion study is required to be done or is done voluntarily by an applicant, an application for a shoreline setback determination shall not be deemed complete unless the coastal erosion study has been accepted by the Director.

(6) Any non-governmental study shall be valid for no longer than a period of five (5) years from the date of its acceptance by the Director which shall be by certified letter issued by the Planning Department.

(7) The coastal erosion study shall consider the purpose of the study—to safely site structures away from hazards such as erosion so that shoreline hardening will not be required to protect the property during its useful life.

“Coastal hazard” means natural processes in the coastal zone that are generated by geologic, oceanographic, and/or meteorological processes that place people and/or improvements at risk for injury and/or damage.

“Commission” means the Planning Commission of the County of Kaua‘i.

“Department” means the Planning Department of the County of Kaua‘i.

“Director” means the Planning Director of the Planning Department of the County of Kaua‘i.

“Dwelling Unit” means any building or any portion thereof which is designed or intended for occupancy by one (1) family or persons living together or by a person living alone, and provides complete living facilities within the unit for sleeping, recreation, eating and sanitary facilities, including installed equipment for only one (1) kitchen.

“FEMA” means the Federal Emergency Management Agency.

“FIRM” means the Flood Insurance Rate Map.

“Hazard Assessment” means assessment for erosion, wave, flood, and inland zone following the standards in Section 4.3 of the Hawai‘i Coastal Mitigation Guidebook, (January 2005).

“Lot” means a portion of land shown as a unit on an approved and recorded subdivision map.

“Makai” means seaward or in a seaward direction.

“Mauka” means landward or in a landward direction.

“Minimum buildable footprint” means the building footprint of 2,100 square feet or as allowed in Section 8-27.10(a).

“Minor activity” means an activity that:

- (1) costs less than \$125,000; and
- (2) does not adversely affect beach processes, does not artificially fix the shoreline, does not interfere significantly with public access or public views to and along the shoreline; and
- (3) does not impede the natural processes and/or movement of the shoreline or sand dunes, and does not alter the grade of the shoreline setback area, except for landscaping, clearing (grubbing) of vegetation, and grading, which are exempt from HRS Chapter 343; and
- (4) is consistent with the purposes of this article and HRS Chapter 205A, as amended.

"Minor structure" means:

(1) a structure that costs less than \$125,000 and provides temporary emergency protective measures for a legally habitable structure that is imminently threatened by coastal hazards provided that the protective measure has received approval in accordance with the Special Management Area Rules of the Kaua'i Planning Commission and/or the State Department of Land and Natural Resources (as may be the case), relocation of the endangered structure has been considered and is not reasonable given the nature of the emergency, the protective measure is removed within one hundred eighty (180) days of its installation, and given the significance of the emergency, the protection is the best management alternative with respect to beach, shoreline, and/or coastal resource conservation, or

(2) a structure that:

(A) costs less than \$125,000; and

(B) does not adversely affect beach processes, does not artificially fix the shoreline, and does not interfere with public access or public views to and along the shoreline; and

(C) does not impede the natural processes and/or movement of the shoreline and/or sand dunes, and does not alter the grade of the shoreline setback area; and

(D) is consistent with the purposes of this article and HRS Chapter 205A, as amended; and

(E) includes, but is not limited to, lighting in conformance with HRS Chapter 205A, landscape features, barbeques, picnic tables, benches, chairs, borders, wooden trellis, bird feeders, signs, safety improvements, movable lifeguard stands, walkways for access, outdoor showers and water faucets, public utility lines, utility poles and accessory structures along existing corridors, temporary tents for special events not exceeding fourteen (14) consecutive days in duration during any three-month period, walls and fences that are located more than forty (40) feet from the shoreline, landscape planting and irrigation systems provided that they are directed away from a valid certified shoreline and do not artificially extend the shoreline or shoreline setback area seaward; and

(F) excludes, but is not limited to, any in-ground swimming pools or spas, garages, carports, concrete walkways that are reinforced, concrete walkways that are not saw-cut at a minimum of three (3) foot intervals, and concrete steps.

"Natural catastrophe" is a natural disaster qualifying for a governor's declaration of emergency pursuant to Hawai'i Revised Statutes Chapter 128, or a presidential declaration of emergency of a major disaster pursuant to 42USC5170, including those caused by episodic coastal hazards such as tsunamis and hurricanes, and not the result of other coastal hazards or processes such as erosion or sea level rise.

"Nonconforming structure or activity" means a structure or activity which is lawfully existing within the shoreline setback area because it:

(1) Was completely built, in its present form, prior to June 22, 1970; or

(2) Received either a building permit, board approval, or shoreline setback area variance prior to June 16, 1989; or

(3) Was outside the shoreline setback area when it received either a building permit or board approval; or

“Plan” or “site plan” means a detailed construction plan drawn to scale of 1” = 20’ 0” that shows the design of a structure proposed to be built within the shoreline setback area. The plan shall be based on an accurate instrument by a surveyor licensed in the State of Hawaii and shall consist of data including but not limited to:

- (1) Property boundaries;
- (2) Natural features such as large trees, rock outcroppings, and any primary or secondary coastal dunes;
- (3) Topography in and around the proposed construction;
- (4) Any and all shoreline hardening;
- (5) Flood zones, where applicable;
- (6) Existing and proposed structures and their proximity to the shoreline and shoreline setback area;
- (7) Fences, walls, and any other structures in the shoreline setback area and any potential hindrances to lateral access along the shoreline;
- (8) A geo-referenced survey of the site; and
- (9) Any other information which identifies the existing condition of the subject parcel of land.”

“Primary Coastal Dune” means the first dune encountered mauka of the beach.

“Qualified professional consultant” means a coastal scientist with a masters of science degree or doctorate in geology, geography, or other appropriate physical science relating to coastal processes, or an engineer licensed in the State of Hawai’i that has experience in coastal processes.

“Qualified Demolition” means the demolition of a structure or structures where such demolition:

- (1) Will not adversely affect beach processes;
- (2) Will not artificially fix the shoreline;
- (3) Will not interfere with public access, except for public safety reasons during demolition operations;
- (4) Will not interfere with public views to and along the shoreline, except during demolition operations;
- (5) Will be consistent with the intent of open space enhancement as reflected in these rules and HRS 205A; and
- (6) Will comply with applicable County Codes.

“Rebuilding” means reconstruction of a lawfully existing dwelling unit when the reconstruction is valued by a licensed professional engineer or architect at fifty percent (50%) or more of the current replacement cost of the structure.

“Repair” means the fixing of damages to a structure where the cost thereof is valued by a licensed professional engineer or architect at less than fifty percent (50 %) of the current replacement cost of the structure.

“Revetment” shall mean a facing of stone, concrete, blocks, or other similar materials built to protect a scarp, embankment, or shore structure against erosion by wave action or currents.

“Rocky Shoreline” means a shoreline segment acting as the primary interface between marine dominated processes and terrestrial dominated processes that is composed of hard, non-dynamic, non-erodible material such as basalt, fossil limestone, beach rock, or other natural non-dynamic material, not to include cobble or gravel beaches that are dynamic in nature, or erodible cliffed shorelines composed dominantly of dirt or clay.

“Shoreline” is as defined in Section 205A-1, Hawai'i Revised Statutes, as amended, and as established pursuant to Section 205A-42, Hawai'i Revised Statutes, as amended.

“Shoreline Change Reference Feature (SCRF)” means a morphologic feature commonly referred to as the “toe” of the beach, which represents the base of the foreshore or approximating the Mean Lower Low Water (MLLW).

“Shoreline setback area” means “shoreline area” as defined in Section 205A-41, Hawai'i Revised Statutes, as amended.

“Shoreline setback line” is as defined in Section 205A-41, Hawai'i Revised Statutes, as amended.

“Storm buffer zone” is the first forty feet (40') of the shoreline setback area as measured from the shoreline.

“Structure” is as defined in Section 205A-41, Hawai'i Revised Statutes, as amended.

“Substantial construction” means that one hundred percent (100%) of the foundation has been laid, or that one hundred percent (100%) of the foundation of the active phase of a project has been laid where the project is being done in phases.

“Temporary structures or activities” means structures or activities that will exist for no longer than six (6) months and will not irreversibly and adversely affect beach processes, public access, or public views nor artificially fix the shoreline in an irreversible way, and from which there will be a public benefit.

“Use” means the purpose for which land or building is arranged, designed, or intended, or for which either land or building is or may be occupied or maintained.

Sec. 8-27.3 Shoreline Setback Determination: Establishment of the Shoreline Setback Line.

(a) No shoreline setback line shall be established for any lot subject to this Article unless the application for a shoreline setback line includes a shoreline survey certified not more than six (6) months prior to submission of the application.

(b) For lots with an average depth of one hundred sixty (160) feet or less, the shoreline setback line shall be established based on the average depth of the lot as provided in Table 1, or at the option of the applicant, upon a coastal erosion study as provided in Table 2.

Table 1: The distance in feet of the shoreline setback line as measured from the certified shoreline based on the average lot depth in feet. See attached table and substitute for below:

If the average lot depth is:	100 feet or less	101 to 120 feet	121 to 140 feet	141 to 160 feet	161 to 180 feet	181 to 200 feet	More than 200 feet
Then the minimum setback distance	40 feet	50 feet	60 feet	70 feet	80 feet	90 feet	100 feet

(c) For lots with an average depth of more than one hundred sixty (160) feet, the shoreline setback line shall be established based on a coastal erosion study as provided in Table 2 and shall be no less than the setback distances set forth in Table 1 as applicable.

Table 2: The distance in feet of the shoreline setback line as measured from the certified shoreline based on the building footprint and a coastal erosion study.

For structures with a building footprint that is:	Less than or equal to 5,000 square feet	Greater than 5,000 square feet
Then the setback distance is:	40 feet plus 70 times the annual coastal erosion rate	40 feet plus 100 times the annual coastal erosion rate

(d) Any shoreline setback line established based on a coastal erosion study may be reviewed by the Planning Commission to ensure that the law has been properly followed.

(e) No zoning amendment, general plan amendment, development plan amendment, or subdivision, any of which involves lands, or any portion of land, subject to this Article, shall be approved without a coastal erosion study and a shoreline setback line established in accordance with Table 1 and Table 2. In cases where these methods result in lines that cross or intersect each other, the most māuka (landward) segments of each line shall form the shoreline setback line.

(f) When an application for a Shoreline Setback Determination has been certified complete by the Director on a form prescribed by the Director, the Director shall, within one hundred twenty (120) days of the completed application, issue a Shoreline Setback Determination which shall conform to the delineation of the shoreline setback line on a site plan pursuant to Section 8-27.3.

(g) Prior to commencement of grubbing, grading, or construction activities, the shoreline and shoreline setback line shall be identified on the ground and posted with markers, posts, or other appropriate reference marks by a surveyor licensed in the State of Hawai'i.

(h) The application of Section 8-27.3 by itself shall not make a dwelling unit nonconforming.

Sec. 8-27.4 Minimum Shoreline Setback Requirements

Except as provided for in this article, no lot shall have a shoreline setback line of less than forty (40) feet.

Sec. 8-27.5 Structures and activities subject to these rules.

All structures and activities located or proposed to be located within the shoreline setback area shall conform to the requirements of this article. The requirements of this article shall not abrogate the requirements of any other applicable statutes, codes, ordinances, rules and regulations, or other law. Construction immediately mauka of the shoreline setback area shall also be subject to these rules unless a certified and confirmed survey map, prepared in accordance with the provisions of section 8-27.3, is filed with the department showing that the construction is mauka of the shoreline setback area.

Sec. 8-27.6 Prohibited Activities in the Shoreline Setback Area.

(a) Pursuant to HRS 205A-44, as amended, the mining or taking of sand, dead coral or coral rubble, rocks, soils, or other beach or marine deposits from the shoreline setback area is prohibited with the following exceptions:

(1) The taking from the shoreline setback area of the materials, not in excess of one gallon per person per day, for reasonable, personal noncommercial use; or

(2) Where the mining or taking is authorized by a variance pursuant to these rules; or

(3) The clearing of these materials from existing drainage pipes and canals and from the mouths of streams, including clearing for the purposes under HRS section 46-11.5; provided that, the sand removed shall be placed on adjacent areas unless such placement would result in significant turbidity; or

(4) The cleaning of the shoreline setback area for state or county maintenance purposes, including the clearing of seaweed, limu, and debris under HRS section 46-12; provided that, the sand removed shall be placed on adjacent areas unless the placement would result in significant turbidity.

(b) Any primary coastal dune, which lies wholly or partially in the setback area, shall not be altered, graded, or filled in any way except for the addition of sand of compatible quality and character unless the application of this section renders the build-out of allowable density unfeasible. In such case, modifications, alterations, grading, or filling may be allowed through a variance, but only for that portion of the primary dune located mauka (landward) of the shoreline setback area, and only to the extent necessary to construct on a minimum building footprint. This exception shall apply only to lots in existence on the date of enactment of this ordinance. Non-native vegetation may be removed only if done in conjunction with a dune restoration and re-vegetation program approved by the Director that uses naturally occurring historical endemic plant species.

Sec 8-27.7 Permitted structures and activities within the shoreline setback area.

(a) The following structures and activities are permitted in the shoreline setback area. All structures and activities not specifically permitted in this section are prohibited without a variance.

(1) Existing nonconforming structures/activities.

(2) Structure or activity that received a shoreline variance or administrative approval prior to the effective date of this ordinance.

(3) A structure or activity that is necessary for, or ancillary to, continuation of agriculture or aquaculture existing in the shoreline setback area on June 16, 1989.

(4) "Temporary structures or activities" as defined in Section 8-27.2. To ensure that there will be no irreversible or long-term adverse affects, the Director shall require as a condition of a permit the restoration of the site to its original condition or better, and the director may require a bond to ensure such restoration.

(5) A structure or activity that consists of maintenance, repair, reconstruction, and minor additions or alterations of legal boating, maritime, or water sports recreational facilities, which are publicly owned, and which result in no interference with natural beach processes; provided that permitted structures may be repaired, but shall not be enlarged within the shoreline setback area without a variance.

(6) Repairs to a lawfully existing structure, including nonconforming structures, provided that:

(A) The repairs do not enlarge the structure nor intensify the use of the structure or its impact on coastal processes;

(B) The repairs are valued by a licensed professional engineer or architect at less than fifty percent (50%) of the current replacement cost of the structure; and

(C) The repairs are permitted by building code, flood hazard regulations, and special management area requirements under HRS Chapter 205A.

(7) Beach nourishment or dune restoration projects approved by all applicable governmental agencies.

(8) A structure or activity approved by the Director as a minor structure or activity.

(9) Qualified demolition of existing structures.

(b) The following conditions shall apply to any new structure or activity permitted in the shoreline setback area:

(1) All new structures shall be constructed in accordance with the standards for development in Chapter 15, Article 1, Flood Plain Management, Kaua'i County Code, relating to coastal high hazard districts and FEMA guidelines regarding FIRM maps.

(2) The applicant shall agree in writing that the applicant, its successors, and permitted assigns shall defend, indemnify, and hold the County of Kaua'i harmless from and against any and all loss,