THE HOMEOWNER'S GUIDE TO THE COASTAL CONSTRUCTION CONTROL LINE PROGRAM (SECTION 161.053, FLORIDA STATUTES)

The Florida Department of Environmental Protection
DIVISION OF BEACHES AND COASTAL SYSTEMS

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THE BEACH AND SHORE PRESERVATION ACT

The purpose of the Florida Beach and Shore Preservation Act, pursuant to Parts I and II of Chapter 161, Florida Statutes (F.S.), is to preserve and protect Florida's beach and dune systems. The Coastal Construction Control Line (CCCL) program, one of three interrelated components of the Statewide Beach Management Program, protects the beach and dune system from imprudent upland construction which could weaken, damage, or destroy the integrity of the system. The remaining two components contained in the Act are the Beach Erosion Control Program, which provides for the restoration and maintenance of critically eroding beaches, and the Joint Coastal Permit Program, which protects the shoreline from activities which could contribute to erosion, water pollution or habitat degradation. This guide provides coastal homeowners with information about the purpose and construction requirements of the CCCL Program.

THE CCCL: A JURISDICTIONAL BOUNDARY - NOT A SETBACK LINE

Pursuant to Section 161.053, F.S., the CCCL is a line of jurisdiction, defining the landward limit of the Department's authority to regulate construction. Control lines should not be confused with setback lines or lines of prohibition. New construction as well as additions, remodeling, and repairs to existing structures are allowed seaward of the control line; however, such structures and activities, unless exempt by rule or law, require a CCCL permit from the Department.

THE VALUE OF BEACHES AND DUNES

No other state and very few countries, if any, possess an abundance of high quality beaches as found in Florida. The 780 miles of sandy coastline are one of Florida's most valuable natural resources. Florida's beaches earn this status because they serve several important functions, each being vital to maintaining the health of Florida's economy and environment.

The beach and dune system is home to hundreds of species of plants and animals which are dependent upon the beaches and dunes. For example, beaches are used by resident and migratory shorebirds for resting, foraging and nesting and during the summer months. Five species of endangered or threatened sea turtles come ashore to nest on the Florida's beaches. Over 30 animals considered rare within the state inhabit the beach and adjacent dune habitats. These plants and animals are adapted to living in the beach's harsh environment of salt spray, shifting and infertile sand, bright sunlight, and storms.

Beaches are also home to humans. Florida's beaches have attracted 15 million people to the state and 57% of Florida's residents live within ten miles of the coast (State of the Coast Report, 1998). Both tourists and residents come to the beaches to relax and enjoy the sights and sounds of its natural beauty. Others visit the beaches to engage in boating, fishing, diving, and other recreations. Florida's beaches are an integral part of the state's economy, attracting tourists from around the world. Beach tourism generates about $15 billion a year to the state's economy (State of the Coast Report, 1996).

The beach and dune system is the first line of defense against storms. It acts as a buffer between the storm waves and coastal uplands. During hurricanes, storm surges and waves encounter the beach and dunes before crashing into upland structures. When this happens, the sand making up the beach and dune system may be temporarily lost to the offshore bar system, reducing the damage suffered by upland property and structures.

THE PURPOSE OF THE CCCL PROGRAM

The CCCL Program is an essential element of Florida's coastal management program. It provides protection for Florida's beaches and dunes while insuring reasonable use of private property. In recognizing the value of the state's beaches, the Florida legislature initiated the CCCL Program to protect the natural environment from improperly sited and designed structures which can jeopardize the stability of the beach-dune system, accelerate erosion, provide inadequate protection to upland structures, endanger adjacent properties, and interfere with public beach access and sea turtle nesting. Adoption of the CCCL establishes an area of jurisdiction in which special siting and design criteria are applied for construction and related activities. These standards are often more stringent than those applied in the rest of the coastal building zone. Construction closest to the beach is subject greater wind, wave and surge forces expected to occur in the more seaward zone of the beach during a storm event.

Chapter 62B-33, Florida Administrative Code (F.A.C.), provides the design and siting requirements for obtaining a coastal construction control line permit. Approval or denial of a permit application is based upon a review of the siting or location of structures relative their proximity to the beach and the potential impacts to the beach dune system, adjacent properties, native salt resistant vegetation, and marine turtles. While most permit requests are approved as submitted, some are modified during the permitting process.

A REGULATORY PROGRAM THAT WORKS

Hurricane Opal, which struck the Florida Panhandle on October 4, 1995, was one of the most destructive coastal storms in the modern history of Florida. More coastal structures were damaged or destroyed by coastal water and wave forces by this single event than by the aggregate of all the coastal storms occurring in Florida since 1975. The storm also caused significant coastal erosion over a 175.5 mile area of the Panhandle, leveling dunes and causing major shoreline and dune recession, threatening the economic viability of much of the region and leaving many areas vulnerable to future coastal storms.

The storms of the very active 2004 and 2005 hurricane season produced similar, extensive damage. Most of the damage occurred to habitable structures (which include single and multi-family homes) constructed prior to the establishment of the state's CCCL Program and as a result were not built to the more stringent construction standards of the current program. Habitable structures built to the CCCL Program's standards (those constructed to withstand the wind and water forces experienced in a high hazard coastal zone) survived. Specifically, of the 1,992 major habitable structures impacted by Hurricane Opal, 768 (or 40%) were destroyed. On the other hand, of the 576 structures permitted by the CCCL Program, only 2 (or 0.2%) were destroyed. Experiences during the 2004 and 2005 hurricane seasons confirmed the importance of CCCL Program standards in reducing damage to structures and the beach and dune system.

DETERMINING THE LOCATION OF THE CCCL

The control line represents the landward limit of the significant damage to upland structures from water forces from a one-hundred year coastal storm. Structures located seaward of the CCCL are expected to be impacted by the high winds and storm surges which accompany such severe storms and therefore should be designed and built to withstand those forces.

Historical weather data, including past hurricanes which have impacted the area of study, tide cycles, offshore bathymetry, erosion trends, upland topography, and existing vegetation and structures are evaluated using appropriate engineering predictive models and scientific principles to determine the upland limits of the effects of a one-hundred year storm. It is important to note that other major storm effects, including wind and flooding may penetrate much farther inland than the control line, however, the magnitude of the forces associated with those effects is considerably less than those which are anticipated seaward of the control line.

PROPERTY VALUES AND INSURANCE RATES

When built in accordance with current coastal design standards, coastal structures have a greater likelihood of surviving major coastal storms, including hurricanes, and pose less interference with the beach and dune system's ability to recover after a storm. The increased cost of construction over conventional construction is primarily due to the need to elevate the structure on a pile supported foundation. Other design components, such as windows built to withstand hurricane forces and the construction of breakaway walls and frangible structures on the bottom floor, may also increase construction costs. Structures built to the current CCCL standards, although may be more expensive to build, have greater value. This is especially evident in the post storm recovery period.

Based upon the Economic Impact Statements prepared for the counties within which control lines have been reestablished, buildings that are designed to withstand the storm impact of a 100-year return interval storm will reduce owner's risks, reduce their losses, and thereby reduce their annual insurance premiums. Federal flood insurance premiums recognize state coastal construction standards. Thus, having property within the CCCL jurisdiction does not affect an owner's ability to obtain insurance, may actually increase it and will provide hazard mitigation benefits.

EXEMPTIONS

Pursuant to Section 161.053, F.S., and Rule 62B-33.004, F.A.C., the following activities are exempt from the permitting requirements of the CCCL Program.

- Structures which are "under construction" prior to the establishment of a CCCL. In order to be considered "under construction", construction must be ongoing at or above the level of the building's foundation.
- Modifications, maintenance, or repairs to existing structures that occur within the limits of the existing foundation and do not involve modifications to the foundation itself. Specifically excluded from this exemption are seawalls and any additions or enclosures added below the first dwelling floor of the existing structure.
- Minor activities determined by the Department that do not have an adverse impact on the beach and dune system. Examples of these minor activities include, but are not limited to:
    1) Beach or deck furniture and awnings.
    2) Tie-downs, or anchors to existing minor structures or trees.
    3) Portable public lifeguard stands.
    4) Mono-post structures including umbrellas, antennas or light posts provided there is minimal disturbance to the beach and dune system, no damage to vegetation, and the grade is restored.
    5) Minor recreational diggings and other forms of art on the unvegetated beach provided no removal or filling of sand at the site.
    6) The removal of windblown sand from paved roads and parking areas, beach access ramps, pools, patios, walkways or decks, not involving a change in the general grade and provided

that any beach quality sand is returned to the beach and dune system seaward of the CCCL.

7) The minor maintenance of bulkheads and seawalls specifically involving scraping, chipping, sandblasting, guniting, and painting.
8) Minor structures, including but not limited to driveways, water wells, and irrigation wells which are either located within the landward shadow of existing habitable major structures, landward of the second line of development of major structures, or landward of public evacuation routes.
9) Maintenance or repair of the structures listed below. The structure(s) must be located a minimum of 30 feet landward of the frontal dune, escarpment, or coastal armoring structure and the maintenance or repair must not expand or enlarge the existing structure(s).
    a) Streets and roads, parking areas, and other paved areas not draining or discharging onto the beach; and
    b) Swimming pools, provided the activity does not involve excavation.
10) Landscape plantings located a minimum of 30 feet landward of the frontal dune, escarpment, or coastal armoring structure which does not involve excavation of existing grade or destruction or removal of native salt tolerant vegetation.
11) Repairs to pile supported foundations which include replacing bolts, hurricane straps, secondary members, and shore- normal cross bracing.

- If the Department determines other proposed activities not listed above are exempt from the provisions of Section 161.053(12)(c)9, F.S., and Chapter 62B-33 F.A.C., the Department can issue a notice of exemption pursuant to paragraph 62B-33.004(3)(d), F.A.C.

For additional details about exempt activities, please refer to Section 161.053(12), F.S., and Rule 62B-33.004, F.A.C.

SITING AND DESIGN CRITERIA OF THE CCCL PROGRAM

Improperly sited and designed buildings interfere with the natural functioning of the beach and dune system. A house built too close to the water's edge or a frontal dune feature is especially vulnerable to the destructive forces of coastal storms and inhibits the beach and dune system from undergoing the natural fluctuations which are a vital part of the recovery process. Homes that are not designed to withstand or avoid storm force wind and waves will not only sustain more damage but they will threaten adjacent properties should they break apart and come into contact with neighboring structures. Improperly designed homes can also cause localized erosion. The Department requires all structures to be sited and designed to avoid or minimize these and other types of adverse impacts to the beach and dune system. The Department will not permit structures which are designed or sited in such a way as to cause a significant adverse impact to the beach and dune system. That is, the structure must not interfere with the system's ability to recover from a coastal storm, result in the destabilization of the system, or cause a take of sea turtle habitat.

Major structures are required to be located a sufficient distance landward of the beach and frontal dune to permit natural shoreline fluctuations, to preserve and to protect beach and dune system stability and to allow natural recovery to occur following storm-induced erosion. Structures must also be sited so as to not result in the removal or destruction of native vegetation which will either destabilize a dune or cause an increase in the amount of erosion by wind and water.

All major structures are required to be designed to resist the predicted forces associated with a one-hundred year storm event. The applicant is required to provide the local county or city building official with certification by a professional engineer or architect registered in the state of Florida that the design plans and specifications submitted are in compliance with the standards contained in Section 3109 of the Florida Building Code and Rule 62B-33.007, F.A.C.

The following design requirements and standards must be met for major structures:

- The minimum building code adopted for the area pursuant to Sections 553.70 through 553.895, F.S.;
- Section 6, American National Standards/American Society of Civil Engineering 7-88 "Minimum Design Loads for Buildings and Other Structures", except that single family homes and other major habitable structures must be designed to withstand a minimum basic wind speed of 110 miles per hour;
- Elevation on pile foundation so as to locate the building's support structure above the breaking wave crest of a 100-year storm (the Department will determine the elevation for each area);
- Pile foundations must withstand all reasonable erosion, scour, and wind and water loads resulting from a 100-year storm;
- Exclusion of substantial walls or partitions below the level of the first floor (only breakaway or frangible walls are permitted in this area);
- Consideration of all hydrostatic and hydrodynamic loads which would be expected under the conditions of a 100-year storm event; and
- Swimming pools must be sited to ensure their failure does not adversely affect the beach and dune system, adjacent structures, or coastal protection structures.

GENERAL PERMITS

CCCL General Permits offer streamlined application and approval procedures as described in Chapter 62B-34, F.A.C. These procedures allow for project approval within 30 days of application submittal. General Permits are available for single family houses, decks, garages, and other construction projects located well upland from the beach and sensitive dunes. Pools, multi-family residences, and other construction that does not meet the requirements of the Florida Beach and Shore Preservation Act or the CCCL standards in Section 3109 of the Florida Building Code are not eligible for General Permits.

To further streamline the process, the Department is establishing "General Permit Lines" identifying areas eligible for General Permits. Starting in northeast Florida, the Department has identified segments of the shoreline in Nassau, Duval, St. Johns, Flagler and Volusia Counties, where projects will be sited sufficiently landward so as not to interfere with coastal processes or damage critical dune systems. Projects located landward of a General Permit Line are eligible for streamlined permitting. General Permit Lines that have been established to date are available for viewing at the Bureau of Beaches and Coastal Systems interactive web mapping site, http://bcs.dep.state.fl.us/rcmd, described in the Internet Resources section below.

REBUILDING

There is no prohibition against rebuilding seaward of the CCCL. Generally, rebuilt structures must comply with the siting and design standards of Section 161.053, F.S., and Chapter 62B-33, F.A.C. However, the statute allows for relaxation of some new construction standards under certain circumstances. Repair, maintenance or modification of existing structures within the confines of the existing foundation and not involving work on the foundation itself is exempt from the permitting requirements. Existing structures may be moved to a more landward location or to an improved foundation as long as the move does not result in an increase in adverse impacts to the beach and

dune system. Structures that are damaged or being rebuilt for economic reasons may be rebuilt within the confines of the existing foundation upon compliance with design standards.

RESTRICTIONS SEAWARD OF THE 30-YEAR EROSION PROJECTION LINE

The 30-year erosion projection line is the projected location of the seasonal high water line (SHWL) on the subject property thirty years following submittal of an application for a permit. The SHWL is essentially a "spring tide" line defined by Section 161.053, F.S., as "...the line formed by the intersection of the rising shore and the elevation of 150 percent of the local mean tidal range above local mean high water." The location of the 30-year erosion projection line is based on documented historical shoreline changes for that area and is available from the Department. In areas with substantial seawalls, the 30-year erosion projection line stops at the wall.

No major structures are eligible to receive a CCCL permit seaward of the 30-year erosion projection except for coastal, shore protection and single family dwellings meeting specific siting requirements as set forth in Subsection 161.053(6), F.S. Structures built seaward of the 30-year erosion projection line which are destroyed by a storm may be rebuilt if the proposed reconstruction is otherwise eligible for a permit pursuant to Chapter 161, F.S. Rebuilt structures, located seaward of the 30-year erosion projection line, may not expand (enlarge) the capacity of the original structure.

SEAWALLS (RIGID COASTAL ARMORING)

While coastal armoring provides protection to upland properties and structures from waves generated by coastal storms, seawalls and revetments adversely impact the beach and dune system. In areas of existing erosional stress, coastal armoring causes increased erosional stress on the beaches fronting the armoring and those adjacent to it. Seawalls can also interfere with marine turtle nesting activities.

Due to the potential adverse effects on the beach and dune system from seawalls, the Department encourages applicants to consider and evaluate other protection methods such as foundation modification, structure relocation and dune restoration. In order to be eligible for coastal armoring, the structure to be protected must be either public infrastructure (public evacuation routes, public emergency facilities, and hospitals) or a private structure such as a non-conforming single family home. The structure must also be vulnerable to either direct wave attack or to erosion from a 15-year return interval storm.

If armoring is the selected option, then the proposed armoring must meet certain siting and design criteria. Please refer to Sections 161.053, and .085, F.S., and Rule 62B-33.0051, F.A.C., for specific siting and design criteria. In general, the armoring must be sited as far landward as practicable to minimize adverse impacts to the beach and dune system, marine turtles, native salt-tolerant vegetation, and existing upland and adjacent structures. The armoring must be designed to provide protection to vulnerable structures while minimizing adverse impacts to the beach and dune system.

PROTECTING MARINE TURTLES AND NATIVE COASTAL VEGETATION

Florida's beaches host the largest gathering of nesting marine turtles in the United States and provide critical habitat for many species of native coastal vegetation. Chapter 161, F.S., provides for

the protection of the endangered marine turtles and native coastal vegetation by allowing the Department to condition the nature and timing of CCCL projects.

Marine turtle hatchlings instinctively move away from the shadows of the beach and toward the brighter horizons of the ocean. Artificial lights from buildings, streets or parking lots draw them in the wrong direction and result in death from predation and dehydration. A single light left on near a marine turtle nesting beach can misdirect and kill hundreds of hatchlings. To prevent hatchling disorientation and adverse impacts to nesting turtles, exterior house lighting visible to the nesting beach area is strongly discouraged. If exterior lighting is proposed, then it must be shielded or otherwise designed so as not to disturb nesting marine turtles or their hatchlings. Tinted glass shall be used for windows and doors which are visible from the nesting areas of the beach.

Native coastal vegetation plays a key role in the protection of the beach and dune system and upland structures. Plants native to the beach and dune environment help retain and build sand dunes which protect property from storm damage, provide food and shelter for unique coastal wildlife, and require less watering, fertilizer, and pesticides which saves time, money, and reduces pollution from unnecessary chemicals.

In order to protect native coastal vegetation, construction seaward of the CCCL may not result in the removal or destruction of native vegetation which would either destabilize a frontal, primary or significant dune or cause a significant adverse impact to the beach and dune system due to increased erosion by wind or water. Unless expressly authorized by the permit, native coastal vegetation destroyed during construction should be replaced. To minimize damage to native coastal species, construction sites are to be located in previously disturbed areas or areas with exotic vegetation.

CONTACTING THE DEPARTMENT

To obtain a copy of a CCCL permit application form, Chapter 161, F.S., or Chapter 62B-33, F.A.C., or to speak with the CCCL engineer for your county, please contact: the Bureau of Beaches and Coastal Systems at the following address:

Florida Department of Environmental Protection
3900 Commonwealth Boulevard, Mail Station 300
Tallahassee, Florida 32399-3000
850-488-7708

INTERNET RESOURCES

Several web-sites offer access to forms, guidelines and maps valuable to persons seeking information on the CCCL Program. The Department of Environmental Protection, Bureau of Beaches and Coastal System homepage, located at www.floridadep.org/beaches, contains links to the Coastal Construction Control Line Permitting Program, coastal data, application forms, educational publications, and an interactive web-mapping feature.

Located under "What's New" on the Bureau's homepage and at http://bcs.dep.state.fl.us/rcmd, the web mapping feature allows an internet user to view a beach property in relation to the CCCL, the department's range monument system and other features. The website contains video clips and photographs of Florida's shoreline from spring 2004, and in the aftermath of Hurricanes Charley, Frances, Ivan, and Jeanne, illustrating the effects of beach erosion and damage caused by the four storms.