



Bureau of Beaches and Coastal Systems
Division of Water Resource Management
Department of Environmental Protection

**Guidelines to Local Governments for Emergency Temporary Coastal Armoring
Seaward of the Coastal Construction Control Line**

Under what circumstances can a local government authorize temporary armoring?

If a coastal storm causes erosion of the beach-dune system, under the authority of Section 161.085, Florida Statutes (F.S.) and Chapter 62B-33, Florida Administrative Code (F.A.C.), a local government may take emergency measures for the protection of threatened private residences or public infrastructure.

Emergency relief measures may be taken as long as the following considerations are incorporated into such emergency measures:

- Protection of the beach-dune system
- Siting and design criteria for the protective structure
- Impacts on adjacent properties
- Preservation of public beach access
- Protection of native coastal vegetation and nesting marine turtles, their hatchlings, and other nesting state or federally threatened or endangered species.

Emergency relief measures that result in the installation of temporary armoring are permissible provided a Department of Environmental Protection (Department) permit has not been issued for coastal armoring to protect the threatened structure.

Structures constructed under this authority shall be temporary and the local government or the property owner shall remove the structure or submit a permit application to the Department for a permanent structure within 60 days after the emergency installation of the structure.

Effective July 1, 2007, **ONLY** the Department may authorize dune restoration incorporating sand-filled geotextile containers or similar structures proposed as the core of a restored dune feature, as set forth in section 161.085(9), F.S.

What should a local Government do if they plan to use this authority?

Prior to authorizing, by emergency permit, any temporary measures for the protection of private structures or public infrastructure, an emergency declaration must be made either by the local government or the Department. If an emergency declaration is made, the local government shall provide a written notification to affected property owners and the Department. Such notification shall include:

- Documentation from the local government authorizing the declaration
- The date and details of the storm event that created the emergency

Exception: If the State of Florida issues a declaration of emergency, a local declaration is not required.

Local governments must notify the Department's Bureau of Beaches and Coastal Systems, 3900 Commonwealth Boulevard, Mail Station 300, Tallahassee, Florida 32399-3000, within three working days of installing or authorizing the installation of any armoring. Notification should, at a minimum, include:

- the description of the structure, including a sketch and location;
- the name and address of the property owner; and
- the date of installation.

How long does the local government have for authorizing such emergency measures?

If the local government declares an emergency, all protective measures shall take place within 30 days after the initial erosion event and any temporary emergency structures shall be removed within 60 days of installation. This period may be extended for up to 30 additional days upon the revalidation of the emergency conditions. If the state of Florida declares a shoreline emergency, timelines for activities considered under Section 161.085, F.S., shall be concurrent with the Department's emergency final order timelines.

What are the options for protection?

First and foremost, the types of temporary protective measures must be the minimum required to protect residences and public infrastructure from imminent collapse. Construction debris is not to be used as part of installation, nor is any debris resulting from the storm event to be buried.

The engineer will use their best professional judgment when deciding the most appropriate shoreline protection measure for a specific site. This assessment will be based upon careful consideration of factors such as:

- Potential for physical damage to a residence or public infrastructure because of erosion
- Extent of storm damage to the beach-dune system
- Distance of the residence or public infrastructure from the dune escarpment
- Pre-storm conditions at the site (i.e., critically eroded, eroding, stable, accreting, etc.)
- Potential adverse impacts to adjacent properties resulting from different shoreline protection options
- Where the selected protection option is a temporary structure, the ability to facilitate its removal once the declared emergency has expired
- Time of year when the emergency occurs (e.g., during or outside of the turtle nesting season, likelihood for additional storm activity, etc.)
- Presence/absence of marine turtle nesting habitat and/or marked nests
- Construction schedules for permitted beach restoration or nourishment projects, emergency Federal Emergency Management Agency berms, or locally sponsored dune restoration activities at the site

Based on the criteria listed above, one or a combination of the following protective measures may be authorized by the local government. Armoring is one of several options available to provide protection:

- Placing beach compatible sand from upland sources to construct protective sand berms or for dune restoration activities. This activity is not considered rigid coastal armoring, and therefore the sand may be left in place without a subsequent permit from the Department.

- Placing sandbags to create a temporary barrier seaward of threatened residence or public infrastructure. This is considered coastal armoring, therefore it would require a permit from the Department to remain permanently in place.
- Shoring and reinforcing the foundations of threatened buildings. Although not coastal armoring, this activity would require a permit from the Department, unless specifically allowed by an Emergency Final Order issued by the Department after a major storm event.
- Installing temporary armoring, such as, wooden retaining walls, cantilever sheet pile walls (without concrete caps, tie backs, or other reinforcement), or similar structures seaward of the threatened building. This is coastal armoring and would require a permit from the Department to remain permanently in place.

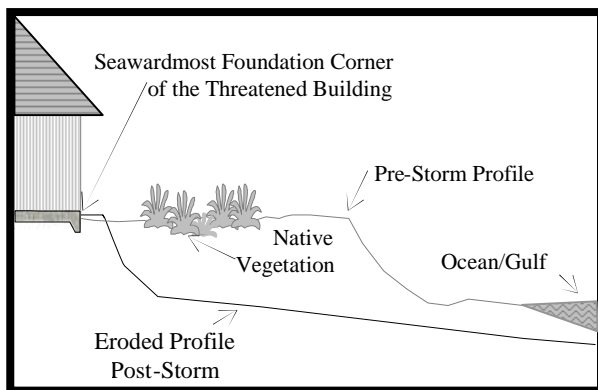
Note: Any excavation of the beach face requires a Coastal Construction Control Line permit from Department. Any excavation that occurs below mean high water on sovereignty lands requires a Joint Coastal Permit from the Department.

What criteria must the armoring meet?

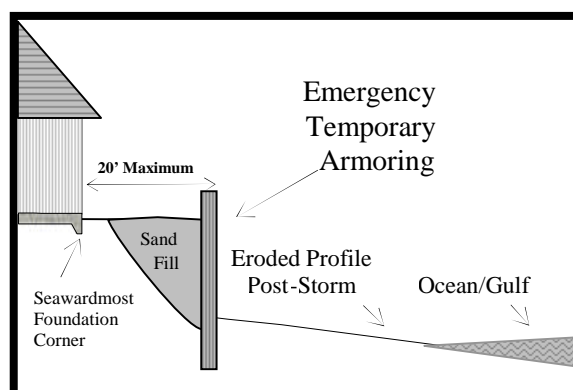
All temporary protective measures shall be installed in a manner that minimizes adverse impacts to the coastal system, native vegetation, and adjacent properties. The temporary protective measures shall be sited at, or landward of the dune escarpment and, as close to a threatened residence or public infrastructure as practicable. In addition to the above, other factors that will influence the location include:

- The type of protective material(s) to be used
- Construction methods
- Site topography
- Severity of erosion threat
- Distance to and height of the post-storm dune escarpment
- Proximity of structures on adjacent properties to the proposed protective measure
- Presence/absence of sea turtle nesting habitat and/or marked nests
- Other site-specific conditions

Generally the temporary armoring should be sited no farther than 20 feet from the seawardmost foundation corner of a threatened building (See figures 1 and 2).



Pre and Post-Storm Profiles
(Figure 1)



Temporary Armoring Location
(Figure 2)

What kinds of structures can be built?

Sandbags, wooden retaining walls, cantilever sheet pile walls (without concrete caps, tie backs, or other reinforcement), or similar structures installed seaward of the threatened residence or public infrastructure.

Can the structures stay in place permanently?

For an emergency temporary structure to be permitted by the Department as a permanent rigid coastal armoring structure an application must be submitted to the Department within 60 days of installation, and the structure must meet all eligibility, siting and design criteria for permanent armoring specified in Chapter 62B-33.0051, F.A.C., and all other applicable provisions of the rule. In order to receive a Department permit for armoring, in addition to other criteria, a structure must be considered both “eligible” and “vulnerable.” Therefore, local governments should make a determination as to a development’s eligibility and vulnerability before issuing an emergency permit to a property owner for the installation of temporary armoring where the property owner intends to submit a permit application to the Department to allow the armoring to remain. Records obtained from the affected property owner(s) and/or Property Appraiser’s Office may assist in this determination. *Eligible* structures include:

- Public infrastructure (e.g., public evacuation routes, public emergency facilities, bridges, power facilities, water or wastewater facilities, other utilities, hospitals, or structures of local governmental, state, or national significance.)
- Non-conforming habitable structures (businesses and houses not constructed under a permit issued by DEP after March 17, 1985)
- Non-habitable structures (e.g., garages, swimming pools, etc.) structurally attached to non-conforming habitable structures whose failure would cause the adjoining habitable structure to become vulnerable

An eligible structure will be determined to be *vulnerable* if:

- The structural foundation of the building (not including ancillary decks or stairs) is exposed or undermined
- The seaward-most foundation corner of the threatened building is within 20 feet of the dune escarpment, as measured perpendicular to the shoreline
- For residences sited on coastal bluffs, a geotechnical analysis which demonstrates that the building is in danger of imminent collapse due to slope instabilities; or
- Another site specific circumstance exists as specified in Chapter 62B-33.0051(1)(a)2, F.A.C.

Temporary armoring that is installed at properties that are not both eligible and vulnerable will not qualify for a Department permit and in most instances will have to be removed.

Property owners that seek Department authorization to allow a temporary structure to remain in place as a permanent coastal armoring structure must submit a complete application to the Bureau at the address referenced above. The permit application form is entitled “Application for a Permit for Construction Seaward of the Coastal Construction Control Line or Fifty-Foot Setback” – DEP Form 73-100 (Revised 12/06). Copies of the form can be obtained by writing to the Bureau at the referenced address or by telephoning (850) 488-7708.

A copy of the application form can also be obtained from the Bureau's web site. The address of the web site is:

<http://www.dep.state.fl.us/beaches/data/pdf/ccclapfm.pdf>.

The application must contain the information requirements specified in Chapter 62B-33.008, F.A.C.

What can a local government do to plan ahead for this emergency situation?

In order to be prepared for coastal emergencies, local governments that anticipate installing or authorizing temporary emergency coastal armoring that may incidentally harm marine turtles or their nesting habitat must first obtain a federal Endangered Species Act, Section 10 Incidental Take Permit from the U.S. Fish and Wildlife Service.

To obtain a permit, the applicant must develop a Habitat Conservation Plan (HCP) that will specify the minimization measures that must be implemented to allow armoring to be installed during sea turtle nesting season (March 1 through October 31 in Brevard through Broward Counties; May 1 in all other coastal counties). The HCP will also specify measures to offset any harmful effects temporary coastal armoring may have on marine turtles or nesting habitat after construction. The HCP process allows coastal armoring while promoting listed species conservation.

The programs and policies contained in the HCP will improve protected species management on Florida's beaches and provide local governments with an action plan for post-storm shoreline protection activities initiated under their emergency authorization. Coastal property owners will benefit because they will be able to pursue temporary shoreline protective initiatives, in conformance with established HCP criteria with full protection for any take that might occur during and after construction. Property owners that subsequently make application to the Department for permanent rigid coastal armoring may also be protected for any take that may occur.

Local governments can contact their local U.S. Fish and Wildlife Service office to determine whether a contemplated activity is likely to require an incidental take permit and to begin the HCP application process.