

# Before the next storm strikes ...



## Temporary Emergency Coastal Protection Systems (TECPS)

by Maccaferri, [www.maccaferri-usa.com](http://www.maccaferri-usa.com)

**COASTAL PROTECTION SYSTEMS USA**



Given the current effects of Climate Change, coupled with the increased population densities along our Nation's coastlines, it is foreseen that Coastal Communities will be subjected to more frequent and intense storm events. What remains unanswered is *Where; When; and What Impact?*

When a storm or significant erosion event occurs the real problems often begin. Decisions such as rebuilding, protecting vital infrastructure and providing immediate post storm protection for life and property, are critical while long term measures are analyzed, developed, approved and implemented.

Coastal Communities rely upon beach land mass, primarily *dune systems*, for protection. A healthy dune system provides the bulk of the protection from inundation and is critical to maintaining a protective feature seaward of the affected communities.

Often this protective dune and beach system are dramatically altered following a storm, greatly reducing the level of protection and increasing the vulnerability of the affected communities to *subsequent storm events* and their effects.

Most responses to coastal storm events often incorporate a large influx of beach fill and occasionally require hard structures such as seawalls and groins.

The time it takes to implement such structures is often measured in years and must pass a large number of regulatory hurdles that vary from location to location.



MacTube®



MacBag®

Today, many communities blame their lack of preparedness on what is perceived as a massive maze of regulatory agencies. These agencies must perform reviews, comment, grant approval and provide funding for a long term solution often leaving the community vulnerable to catastrophic damages over the interim.

*Maccaferri Temporary Emergency Coastal Protection Systems (TECPS)* can quickly be approved and implemented using a variety of materials and techniques.

Maccaferri's TECPS are proposed and designed with 'Emergency Permits' in mind that protect life and property from upcoming and almost certain future storm events.

By regulation, the U.S. Army Corps of Engineers defines "an emergency" as a "situation which would result in an unacceptable hazard to life, a significant loss of property, or an immediate, unforeseen and significant economic hardship if corrective action requiring a permit is not undertaken within a time period less than the normal time needed to process the application under standard procedures".

Maccaferri's TECPS are designed for the individual Homeowner, Homeowner Association, communities, as well as industries providing infrastructure protection. All are designed for *integration* with a long term solution and are *removable* should a more viable long term solution alternative be implemented.

All Maccaferri TECPS are designed for integration within the various regulatory frameworks, local and federal levels.



MacELB



MacELB



Sack Gabion

### MacBag® System Specification

Size (W x L)	Unit Weight (Sand/In-Fill)	Volume (Approximate)	Weight (In-Place)
ft	lbs/ft <sup>3</sup>	ft <sup>3</sup> /(yd <sup>3</sup> )	lbs
3 x 5	125	11.3/(0.4)	1,412
3 x 10	125	22.5/(0.8)	2,812
3 x 15	125	34/(1.3)	4,250

### MacELB System Specification

Size (W x L)	Unit Weight (Sand/In-Fill)	Volume (Approximate)	Weight (In-Place)
ft	lbs/ft <sup>3</sup>	ft <sup>3</sup> /(yd <sup>3</sup> )	lbs
3 x 3 x 3	125	27/(1)	3,375
5 x 5 x 5	125	125/(4.63)	15,625

### MacTube® System Specification

Size	Unit Weight (Sand/In-Fill)	Volume (Approximate)	Weight (In-Place)
15 ft Circ.	lbs/ft <sup>3</sup>	ft <sup>3</sup> /(yd <sup>3</sup> )	lbs
Length - ft	lbs/ft <sup>3</sup>	ft <sup>3</sup> /(yd <sup>3</sup> )	lbs
50	125	896/(33.2)	112,000



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