

# DUNE CONSTRUCTION & RESTORATION

The GLO encourages dune restoration in areas that have recently experienced dune loss or damages due to storm tides. Dune restoration projects may not block or restrict use of the public beach. Plantings of native vegetation should be the primary method for dune construction, improvement, and repair. Only dune vegetation indigenous to the dune system in the area where the vegetation will be planted may be used in dune restoration projects.



## VEGETATION



**Bitter panicum**



**Sea oats**



**Marshhay cordgrass**

Three species of grass are recommended for dune restoration anywhere along the Texas coast: bitter panicum (*Panicum amarum*), sea oats (*Uniola paniculata*), and marshhay cordgrass (*Spartina patens*). Transplants of existing dune plants may also be used, but vegetation should only be harvested from dense, healthy stands at intervals of 2 feet. Continual watering of newly planted vegetation, especially during drought conditions, is encouraged to increase the likelihood of survival.

## NOTICE

Certain organic brushy materials such as seaweed may be used for dune-building, but should not be placed in large or dense piles. Non-organic materials such as plastics, sandbags, rocks, bulkheads, riprap, asphalt rubble, concrete, or tires may not be used for dune building; these materials are not biodegradable and are safety hazards.

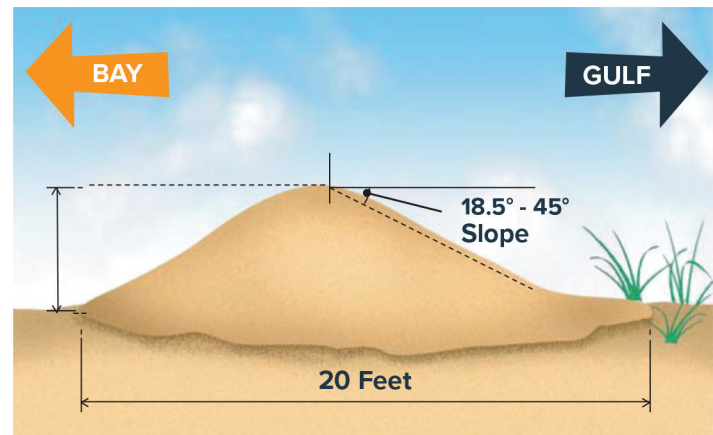




## DUNE CONSTRUCTION

In areas with limited sand supply, it is recommended that dunes be constructed of imported sand. Any imported sand should be similar in color, grain size, and mineral content to the sand on site.

Man-made dunes should be of the same general height, slope, width, and shape as the natural dunes in the vicinity. Generally, they should be no less than four feet high with a slope of no more than 45 degrees (a rise of one foot for every one horizontal foot). A slope of about 18.5 degrees (a rise of one foot for every three horizontal feet) is preferred to help prevent scouring. The initial width of the dune base should be at least 20 feet.



## NOTICE

Dune restoration projects should be located as far landward as possible to reduce the likelihood of becoming damaged by wave action.

