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Guidance Memo
Compliance with NFIP requirements for dune alterations in V Zones

Communities that participate in the National Flood Insurance Program are required to adopt and enforce floodplain regulations that meet FEMA's minimum standards.

This memo will provide guidance specifically for Chapter 44CFR 60.3(e)(7) - *Prohibit man-made alteration of sand dunes within Zones VE and V on the community's Flood Insurance Rate Map which would increase potential flood damage.* It is required that participating communities have this language, or equivalent, in their floodplain ordinance.

Sand dunes are defined as naturally occurring accumulations of sand in ridges or mounds landward of the beach. Dune volume and dimension plays a direct role in providing storm and flood protection. It can generally be assumed that removal of dune material will increase flood risk, and that placing material on adjacent sections of dune, or on the beach will not mitigate these impacts. One method of compliance with this requirement is to prohibit all dune alterations unless an evaluation is done which demonstrates no increase in flood risk. This evaluation should be done in accordance with FEMA's guidelines and specifications for flood study contractors, by an engineer trained in coastal flood studies.

NFIP regulations allow communities to permit some limited land-altering activities to be undertaken in V-Zone dunes without a flood study. Some movement of material is likely unavoidable in construction activities on dune areas, if any construction is allowed. Examples of this would include displacement of material during pile driving or the minimal leveling of material for ground level storage or parking areas. Minimal leveling of material in an area such as a building footprint may be permitted without the requirement of a flood impact study. In most cases, land leveling may have minimal impact on flood risk if no material is removed from within the footprint of the proposed building. The area being leveled should be kept as small as possible.

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However, an engineering analysis must be performed prior to any project which will result in a net loss of material from within the building footprint. This includes movement of material in a landward, seaward or lateral direction.

Retaining walls, bulkheads, and other soil management structures are generally prohibited within V-Zones underneath, connected to, or in close proximity to existing or proposed buildings. For additional information, please consult FEMA's technical bulletin #5 Free of Obstruction Requirements at the following link:
<http://www.fema.gov/plan/prevent/floodplain/techbul.shtm>