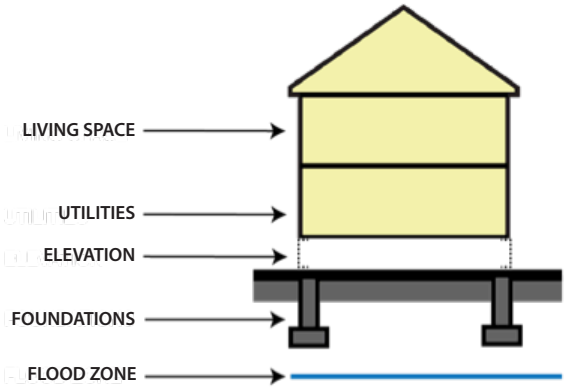



## All homes in flood zones should adhere to the following:

- Must be properly anchored to resist flotation, collapse, and lateral movement.
- Building materials shall be resistant to flood damage.
- Building shall be constructed by method and practices that minimize flood damage.
- Utilities, including electrical, heating, ventilation, plumbing, air-conditioning equipment (including ductwork) shall be designed and/or located so as to prevent water from entering or accumulating within the components.

## More specific NFIP requirements are functions of the flood zone.

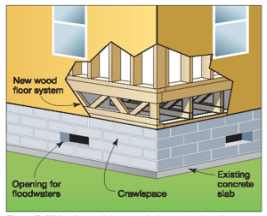



*Figure 7: Mitigating a slab-on-grade house by elevating an existing wood-framed house without the slab and installing a new wood truss floor system (adapted from FEMA P-259 Figure 5E-19)*

*Figure 8: This house in Zone A was detached from its slab foundation (which remains) and elevated on masonry piers. The floor system is supported by new wood joists (Mandeville, LA).*

# FLOODPROOFING

## Dry floodproofing:

- Using waterproof membranes or other sealants to prevent water from entering the structure through the walls or wall penetrations.
- Installing watertight shields over the windows and doors (and anywhere below the level that needs flood protection).
- Installing measures to prevent sewer backup.
- Reinforcing walls to withstand floodwater pressures and impacts generated by floating debris.
- Drainage collection systems and sump pumps to control interior water level, collect seepage, and reduce hydrostatic pressure on slab and walls.
- Anchoring the structure to resist flotation, collapse, and lateral movement.

## Wet floodproofing:

- Permanent or contingent measures are applied to a structure and/or its contents that prevent or provide resistance to damage from flooding by allowing flood waters to automatically enter and exit the structure.
- Under NFIP, wet floodproofing is limited to specific situations in A Zones. Communities may allow wet floodproofing only though the issuance of a variance.

INFO@THEELEVATEDSTUDIO.ORG
PHONE / 646.470.9545
FAX / 646.496.9130
WWW.THEELEVATEDSTUDIO.ORG

THE ELEVATED STUDIO

# A Quick Guide to UNDERSTANDING FLOOD ZONES

**Base Flood Elevation (BFE)**:
Elevation of flooding, including wave height, having a 1% chance of being equaled or exceeded in any given year (a.k.a. "base flood" and "100-year flood"). The BFE is the basis of insurance and floodplain management requirements and is shown on FIRMs.

**Design Flood Elevation (DFE)**: Regulatory flood elevation adopted by a local community. Typically, the DFE is the BFE plus any freeboard adopted by the community. If a community regulates to minimum NFIP requirements, the DFE is identical to the BFE.

**Freeboard**:
The vertical difference between the lowest floor of a building and the BFE, usually expressed in feet. It can be thought of as a factor of safety to compensate for the fact that flood levels may reach higher that the BFE. Since freeboard is determined/enforced by the community, we recommend an additional 2 feet of freeboard to accommodate for predicted sea level rise for 2050.

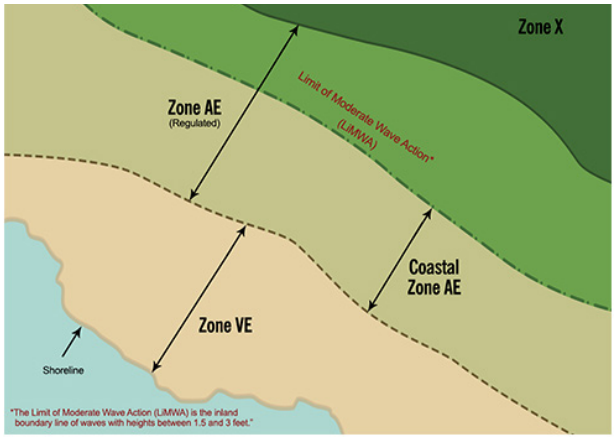
# TYPES OF ZONES

Zone V: Portion of the Special Flood Hazard Area (SFHA) that extends from offshore to the inland limit of a primary frontal dune along an open coast, and any other area subject to high-velocity wave action from storms or tsunamis.

Coastal A Zone: A subset of Zone A. Specifically, that portion of the SFHA landward of Zone V (or landward of a coastline without a mapped Zone V) in which the principal source of flooding is coastal storms, and where the potential base flood wave height is between 1.5 and 3.0 feet.

Zone A: Portion of the SFHA in which the principal source of flooding is runoff from rainfall, snowmelt, or coastal storms where the potential base flood wave height is between 0.0 and 3.0 feet.

Zone X: Includes shaded and unshaded Zone X. The flood hazard is less severe here than in the SFHA.



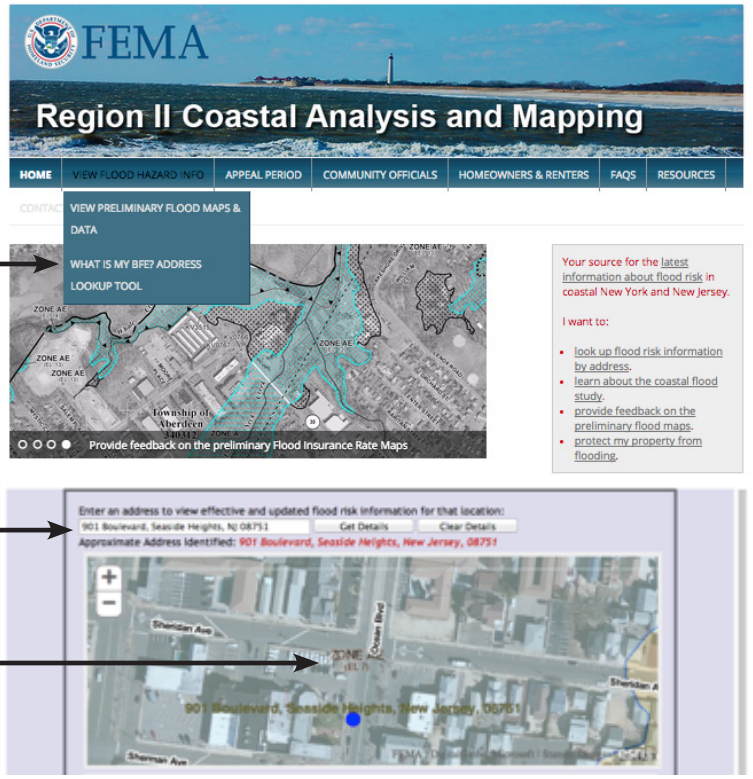

# HOW CAN I FIND MY FLOOD ZONE?

**GO TO:**
www.region2coastal.com

**"What is my BFE Address?"**

**Insert Address**
ex: 901 Boulevard,
Seaside Heights, NJ 08751
**Click "Get Details"**

**Your BFE = EL 7, Zone AE**




# WHAT DOES THIS MEAN?

In ALL zones: Residential buildings MUST be elevated to or above the BFE.

Zone A: Lowest floor including basement must be elevated to or above the BFE. Enclosures below elevated buildings must have flood openings. Nonresidential buildings may be elevated or dry floodproofed.

Zone V: Dry floodproofing is not allowed for non-residential buildings. New buildings must be located landward of the reach of the mean high tide. The bottom of the lowest horizontal structural member of the lowest floor is elevated to or above the BFE. Areas below elevated buildings are either free-of-obstructions or enclosed with lattice or breakaway walls.