

To: Kevin Yecco, Business Administrator
From: Patrick J. Malia, Construction Official

Re: BFE and map adoption
Meeting 10/10/2013
Mayor's Office

Meeting was held to discuss the adoption of the "preliminary working BFE maps".

The most recent maps released by FEMA are being referred to as the "preliminary working Base Flood Elevation (BFE) maps". These maps are considered the best available data and are mandated to be used as the base flood elevation for all new construction or substantial improvement of a structure within the state of New Jersey. The DEP requirements in affect since 2007 also require 1 foot of additional "freeboard" above the elevation stated on these maps. (Note that freeboard is defined by FEMA as an additional safety factor). Therefore any new construction or substantial improvement of an existing structure is required to have the first floor of residential living space elevated to the BFE (best available data) + 1 foot.

The city participates in the NFIPs Community Rating System (CRS) to provide additional discounts to flood insurance policies throughout the municipality. This program provides a point system to rate a community with their flood preparedness or mitigation planning and provide a percentage discount for all flood insurance policies across the municipality. Currently the city is classified as a Class 7 thereby providing a 15% discount to policies. (Note that each 500 points acquired in the CRS program equates to a 5% discount).

The CRS program will provide some additional points if the new working maps are adopted by the municipality prior to the first anniversary of Hurricane Sandy (October 29). The CRS reviewers typically will not provide an exact number of points for adoption yet they have mentioned up to 200 additional points. Keep in mind that the CRS program provides incentives to municipalities enforcing a higher regulatory standard than what typically required.

The State of NJ DEP has provided a model ordinance for adoption of the working maps. This model ordinance contains specific language that must be included to be approved by the CRS reviewer. The ordinance also must contain a "higher regulatory standard" to provide additional CRS credit. There are 2 basic areas where this required language will have an effect.

- 1) The language in the ordinance must require the *most restrictive* elevation between the existing regulatory map (flood map prior to the storm) and the best available data (new maps).
- 2) To be considered a *higher regulatory standard* an additional foot of freeboard must be included (2 foot as opposed to the 1 foot required by the DEP previously mentioned).

The most restrictive clause does not greatly affect North Wildwood as the BFE has dropped in most cases to elevation 9. (Keep in mind that the datum change between the two maps effectively equates to an elevation of 10.3' in similar data, therefore raising the Base Elevation .3' from the elevations prior to the storm).

The addition of an extra foot of freeboard creating a *higher regulatory standard* will require new construction and substantial improvements to be constructed at the BFE indicated on the new map plus 2 feet. (9' NAVD 88 + 2' = 11' NAVD 88)

The elevation prior to the storm was measured in data from 1929 referenced as NGVD 29. The BFE was 10' and required 1' freeboard. (10' NGVD 29 + 1' = 11' NVGD 29).

To convert to similar elevation 1.3' must be added to the NAVD 88 datum therefore the new elevation will be 1.3' above what was required prior to the storm for all new construction and substantial improvements. (11' NAVD = 1.3' conversion factor = 12.3' NGVD 29).

Our understanding is that if the new maps are not adopted with a higher regulatory standard than what is required by the State there will be no CRS credit provided, actually points will be deducted as the city currently receives some credit for enforcing 1' of freeboard.

If the city adopts an additional foot of freeboard (meaning BFE+2') for new construction and substantial improvements, the overall height of a structure as regulated in the zoning code should also be increased so as not to cause additional hardship on those attempting to construct or renovate a structure.

Currently the maximum building height for residential construction is typically 35 feet to the peak of the roof. It was suggested during the meeting that the maximum height limit be increased by 1' to make up for the increase of 1' in the finished floor height.

It is being assumed from conversations with the CRS coordinator that approximately 200 CRS points are available for the discussed map adoption. This will put North Wildwood close to the 2000 overall point mark and a 20% reduction in flood insurance for all policies in the community.