Rebuilding after Hurricane Sandy
Building Safer and Stronger Pays Off
(Coastal High Hazard Area: Zone VE)

Flood risk changes over time as conditions in the community change. Sometimes risk goes down, but more often it goes up. Recent analysis shows that flood risk has increased along the New Jersey and New York coast. Advisory Base Flood Elevations (ABFEs) for Hurricane Sandy-affected coastal areas of New Jersey and New York can serve as a guide to understanding current coastal flood hazard risk and the higher elevations that communities should build to in order to reduce their vulnerability to flooding. ABFEs are being developed using updated coastal flood hazard study methodologies and topographic data. They leverage work already underway prior to Hurricane Sandy to update Flood Insurance Rate Maps (FIRMs) planned for preliminary release mid-2013.

ABFEs can help communities and property owners make informed decisions about rebuilding their homes and businesses to reduce their vulnerability to flooding. They provide an indication of how flood elevations and risk zones are likely to change in the near future. Ultimately, new maps will be released that incorporate this advisory data, which may result in new, higher flood elevations or a new, higher flood risk zone designation. Once adopted by communities, flood elevations and flood risk zones affect minimum building requirements and flood insurance premiums. ABFEs represent the most up-to-date assessment of the current flood risk. Over time, it is possible that flood risk will continue to rise, so property owners may want to consider adding an additional factor of safety on to the advisory information.

For more information on updated flood mapping, visit: www.Region2Coastal.com

Example Rebuilding Scenarios
Assume that your home has been substantially damaged or destroyed and you are now faced with a rebuilding decision. Under the current rules you can rebuild at 4 feet above grade on a conventional foundation. However, in the future, the minimum National Flood Insurance Program building requirements will increase an additional 4 feet and the risk zone changes to a coastal high hazard zone (Zone VE, which requires specific foundation types). This will result in higher insurance costs for buildings constructed to today’s minimum standard.

Key Points
- Flood insurance premiums are based on flood risk. Communities and property owners can save money by reducing their vulnerability to flooding.
- Under new Federal law, flood insurance premium rates on many properties in special flood hazard areas will increase.
- Build correctly and higher to reduce vulnerability to flooding.
- Long-term insurance savings can far exceed initial construction costs.
- ABFEs will be available to communities in the following areas:
  - New Jersey Counties: Atlantic, Bergen, Burlington, Cape May, Essex, Hudson, Middlesex, Monmouth, Ocean, Union
  - New York Counties: Bronx, Kings, New York, Richmond, Queens, Westchester
Now consider these rebuilding scenarios, based on the assumptions listed previously: rebuild to A) the current community BFE standard, B) 4 feet higher than the current BFE, or C) 6 feet higher than the current BFE:

<table>
<thead>
<tr>
<th>Home Elevation</th>
<th>4ft</th>
<th>8ft</th>
<th>10ft</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Cost of Foundation</td>
<td>$18,000</td>
<td>$29,000</td>
<td>$30,000</td>
</tr>
<tr>
<td>Increase in Monthly Mortgage Payment</td>
<td>n/a</td>
<td>$49*</td>
<td>$54*</td>
</tr>
<tr>
<td>Annual Flood Insurance Premium (Coastal High Hazard Area: Zone VE)</td>
<td>$31,500</td>
<td>$7,000</td>
<td>$3,500</td>
</tr>
<tr>
<td>Monthly Cost (Mortgage Increase + Flood Insurance)</td>
<td>$2,625</td>
<td>$632</td>
<td>$346</td>
</tr>
<tr>
<td>Months to Recover Foundation Cost</td>
<td>n/a</td>
<td>14</td>
<td>13</td>
</tr>
<tr>
<td>Savings Over 10 Years</td>
<td>n/a</td>
<td>$239,160**</td>
<td>$273,480**</td>
</tr>
<tr>
<td>Peace of Mind</td>
<td>😞</td>
<td>😊</td>
<td>😊</td>
</tr>
</tbody>
</table>

*Based on the additional expense, compared to Scenario A, of elevating a home from the current BFE to the new BFE.
**Based on a lower flood insurance premium, compared to Scenario A, minus an increase in monthly mortgage payment.

Additional assumptions for illustrative purposes only include:
- Foundation costs are averages - for scenario A they are based on an average of costs for several common foundation types including Slab-on-grade, crawl space, perimeter and pier foundations. Scenarios B and C are based on wood pile foundations.
- Home value is $250,000.
- Flood Insurance policy covers $250,000 building coverage.
- Rebuilding requires a new foundation.
- The costs and savings numbers provided above are based on best-practice estimates and assumptions for foundation costs and flood insurance premiums. Actual costs and premiums may vary by structure, policy types, and specific home values, locations, and sizes.
- Monthly mortgage payments are based on a 30-year fixed rate loan at 3.5% interest.
- Flood insurance premiums are based on 2012 insurance rates represent the premiums after the new BFEs are official and the phase-in of the new rates is completed. Flood insurance premiums are based on 2012 rates and represent premiums after new BFEs are official and the phase-in of new rates is completed.

What’s Next

Property owners should contact their local floodplain manager or building official to find out what permits will be required. Additionally, they should consider implementing flood risk mitigation measures, such as elevating a home or flood proofing a business, which may be covered under flood insurance by Increased Cost of Compliance (ICC). Property owners are encouraged to contact their insurance agent to file their flood insurance claim and ask if ICC applies. They can also visit FloodSmart.gov for more information about flood insurance. In addition, property owners can visit the Hazard Mitigation desk at a local Disaster Recovery Center for more information.