See How the Wagner’s Lowered Their Flood Insurance & Saved Their Home

GG-D Risk Informed Construction
3:30 – 5:00
F.R.E. Evaluation Service Provides

**NFIP POLICY REVIEW**
Forensic audit of the current flood insurance policy to expose any mistakes that may have been made when your policy was initially written that may be causing you to pay more than needed.

**AVAILABLE MITIGATION STEPS**
Ways to mitigate your home or building to reduce the cost of flood insurance.

**FLOOD INSURANCE QUOTES**
We provide you with a complete F.R.E. Flood Risk Report enclosed with a no obligation flood insurance quote that you can expect to pay.
What We Need To Get Started

Elevation Certificate and Insurance Declaration Page

Email these to ec@yourfloodrisk.com
or
Upload them to www.yourfloodrisk.com
717 Reviews / Total Customer Premium Reductions = $1,052,185.00

34% of our reviewed cases can pay lower premiums with reasonable mitigation.

**FEMA Good Case**: This is a simple combination of the sections below:
- **LOMA**: Structure is eligible to apply for a LOMA with FEMA and be placed into the X Zone.
- **Flood Vents**: These are structures where the addition of compliant Flood Vents and less than 1’ of fill/LAG change, will lower flood premiums.
- **Not EC Rated**: Policy in force does not use the existing Elevation Certificate for rating, which would reflect a lower premium.

**LIFT**: Cases where the current premiums can only be lowered if the structure’s lowest rated floor is physically elevated.

**Over 1 FT Fill**: Cases where the basement or crawlspace area of the structure requires a substantial amount of fill. This is necessary to benefit from adding compliant flood venting.

**Load Factor**: Certain crawlspaces below some structures receive a Beneficial Loading Factor, when the flood insurance Rate Tables are applied.

**Remove Part of Structure**: Cases where the structure would benefit from removing a deck or vacating a finished walkout level.

**Compliant**: Cases where the structure is compliant and rated above the BFE.

**Quote Only** (NO EC, X zone): Cases where the client has no EC or is located in the X zone, therefore we issue As Is Quotes.

**Grandfathering**: Cases where the structure may be eligible to be Grandfathered to the map BFE available at the time the structure was built.

<table>
<thead>
<tr>
<th>Case Description</th>
<th>Count</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>FEMA Good Case</td>
<td>246</td>
<td>34%</td>
</tr>
<tr>
<td>LOMA</td>
<td>109</td>
<td>15%</td>
</tr>
<tr>
<td>Flood Vents &amp; Less 1ft Fill</td>
<td>116</td>
<td>16%</td>
</tr>
<tr>
<td>NOT EC Rated (Misrated)</td>
<td>21</td>
<td>3%</td>
</tr>
<tr>
<td>LIFT</td>
<td>65</td>
<td>9%</td>
</tr>
<tr>
<td>Over 1 ft Fill Required</td>
<td>80</td>
<td>11%</td>
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<tr>
<td>Loading Factor</td>
<td>165</td>
<td>23%</td>
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<tr>
<td>Remove Part of Structure</td>
<td>31</td>
<td>4%</td>
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<tr>
<td>Compliant</td>
<td>102</td>
<td>14%</td>
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<tr>
<td>Quote Only (NO EC, X zone)</td>
<td>25</td>
<td>3%</td>
</tr>
<tr>
<td>Grandfathering</td>
<td>3</td>
<td>0%</td>
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<tr>
<td><strong>Total</strong></td>
<td>717</td>
<td>100%</td>
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</tbody>
</table>
Peoria, IL
Mitigating the Wagners
Peoria, IL
Stats

From the Water

• Substantial Improvement 1992 | Elevated
• Diagram 7 Unfinished
• No Flood Vents
• Primary Residence
• Zone A13 | BFE: 460 Firm: 1980
• Elevation of 1st living floor: 460.59 (+1)
• NFIP Premium: $2,038 ($177,00 Building Coverage)
Key Take Aways

• Surveyors need to be better educated, they want to do a good job
• Errors on EC are not picked up by Agents, they just don’t know what to look for
• Residential Mitigation is driven by insurance saving, but leads to resiliency
House Prior to being Elevated
Being Elevated in 1992
Dec Page | Errors by the Agent

<table>
<thead>
<tr>
<th>RATING DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Property/Building</td>
</tr>
<tr>
<td>Contents Location</td>
</tr>
<tr>
<td>Insured’s Principal Residence: Y</td>
</tr>
<tr>
<td>Single family; Two floors; Enclosure with proper openings; Includes Addition and Extension</td>
</tr>
<tr>
<td>Date of construction or substantial improvement was on 06/01/1920</td>
</tr>
<tr>
<td>Coverage Limitations May Apply. See Your Policy for Details.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>LOCATION INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Community Name: PEORIA, CITY OF No: 1705360015B</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COVERAGE AND RATING INFORMATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coverage Type</td>
</tr>
<tr>
<td>Building</td>
</tr>
<tr>
<td>Contents</td>
</tr>
<tr>
<td>ICC PREMIUM</td>
</tr>
<tr>
<td>ANNUAL SUBTOTAL</td>
</tr>
<tr>
<td>RESERVE FUND ASSESSMENT</td>
</tr>
<tr>
<td>FEDERAL POLICY FEE</td>
</tr>
<tr>
<td>TOTAL PREMIUM</td>
</tr>
<tr>
<td>ENDORSEMENT PREMIUM</td>
</tr>
</tbody>
</table>

THIS IS NOT A BILL
- No flood openings
- Because it was substantially improved new construction date is 1992
- Should not be receiving subsidized rates
Errors With EC

- Should be a diagram 7
- Should document square footage which is 968 sq.ft
- Result = High Preimum
### SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

<table>
<thead>
<tr>
<th>B4. Map/Panel Number</th>
<th>B5. Suffix</th>
<th>B6. FIRM Index Date</th>
<th>B7. FIRM Panel Effective/Revised Date</th>
<th>B8. Flood Zone(s)</th>
<th>B9. Base Flood Elevation(s) (Zone AO, use base flood depth)</th>
</tr>
</thead>
<tbody>
<tr>
<td>170536 0015</td>
<td>B</td>
<td>February 1, 1980</td>
<td>February 1, 1980</td>
<td>A13</td>
<td>460.0</td>
</tr>
</tbody>
</table>

B10. Indicate the source of the Base Flood Elevation (BFE) data or base flood depth entered in Item B9.
- [ ] FIS Profile
- [X] FIRM
- [ ] Community Determined
- [ ] Other (Describe) _____

B11. Indicate elevation datum used for BFE in Item B9:  
- [X] NGVD 1929
- [ ] NAVD 1988
- [ ] Other (Describe) _____

B12. Is the building located in a Coastal Barrier Resources System (CBRS) area or Otherwise Protected Area (OPA)?  
- [ ] Yes
- [X] No

### SECTION C - BUILDING ELEVATION INFORMATION (SURVEY REQUIRED)

C1. Building elevations are based on:  
- [ ] Construction Drawings*
- [ ] Building Under Construction*
- [X] Finished Construction


Conversion/Comments

- Top of bottom floor (including basement, crawlspace, or enclosure floor): 450.93 feet 460.59 meters (Puerto Rico only)
- Top of the next higher floor: 460.59 feet
- Bottom of the lowest horizontal structural member (V Zones only): 451.10 feet
- Auxiliary Garage Structure: 451.10 feet
- Lowest elevation of machinery or equipment servicing the building (Describe type of equipment and location in Comments): 450.81 feet
- Lowest adjacent (finished) grade next to building (LAG): 450.81 feet
- Highest adjacent (finished) grade next to building (HAG): 450.81 feet
- Lowest adjacent grade at lowest elevation of deck or stairs, including structural support: 450.81 feet

Check the measurement used.

Where is the first floor compared to the BFE? 460.59-460= .59 Rounded to +1

Without Flood Openings where is the lowest rated floor? 460-450.93= 9.07 Negative 9
NFIP Rates At The Bottom Floor
450.93' (-9) Rating

Actuarial Rates would show the premium to be $6,000+
Flood Vents Installed | September 2014

(5) Engineered Openings Needed

e.g. Smart Vent
Vents are installed in a 16”x8” hole which is the opening left when (1) CMU block is removed from the foundation
- 2 different walls
- Within 12” of adjacent grade
Revised Elevation Certificate

SECTION A - PROPERTY INFORMATION

A5. Building owner's name: Robert Wagner
A6. Building owner's address: 123 E. 45th St., Suite 6, Anytown, CA 90210
A7. City: Anytown
A8. County: County
A9. State: CA
A10. ZIP Code: 90210

SECTION B - FLOOD INSURANCE RATE MAP (FIRM) INFORMATION

B1. Building Flood Insurance Rate Map (FIRM) Number: 123456
B2. Building owner's name: Robert Wagner
B3. Building owner's address: 123 E. 45th St., Suite 6, Anytown, CA 90210
B4. Building's street number: 123
B5. Street name: E. 45th St.
B6. Street suffix: Suite 6
B7. City: Anytown
B8. County: County
B9. State: CA
B10. ZIP Code: 90210

A7. Building Elevation Number: Z

A8. For a building with a crawl space or enclosure(s):
   a) Square footage of crawl space or enclosure(s): 500 sq ft
   b) Number of permanent flood openings in the crawl space or enclosure(s) within 1.0 foot above adjacent grade: 5
   c) Total net area of flood openings in A8.b: 1000 sq in

A9. For a building with an attached garage:
   a) Square footage of attached garage: 968 sq ft
   b) Number of permanent flood openings in the attached garage within 1.0 foot above adjacent grade: 5
   c) Total net area of flood openings in A9.b: 1000 sq in
   d) Engineered flood openings? Yes No

SECTION D - SURVEYOR, ENGINEER, OR ARCHITECT CERTIFICATION

[Diagram and additional text related to surveyor certification and measurements, not fully transcribed in this snippet]
Remember this is how the house was being rated before the retrofit.

NFIP Rates At The Bottom Floor
450.93’ (-9) Rating

Actuarial Rates would show the premium to be $6,000+.
Because of these

Next Higher Floor 460.69 ’ With Retrofit (+1) Rating

BFE 460’

New rating after the installation of vents
New Premium

Old Premium: $2,038

New Premium: $511
75% Reduction

Retrofit Cost: $1,200
Happy Residents

That’s a refund check
Instant Return on Investment
Three checks in total received

Refund total: $3,236.79 – Retrofit $1,200 = $2,036.79 For Vacation!
“Along with the yearly insurance savings our mortgage payment has drop as well so we really did save a lot of money by installing the Smart Vents. *If you have not heard the Illinois River is flooding and we are prepared because of YOU. I am attaching a picture of the Smart Vents in action*. 

Rob Wagner
Go Time.....
Look at the Debris....
Flood Openings on this wall were activated from the inside out. Water flowed from the north to the south.
Debris is a Fact of Flood
Non-Engineered Openings: Issues

Any louvers, blades, screens, and faceplates or other covers and devices should be selected or specified so as to minimize the likelihood of blockage by small debris and sediment. Where experience has shown that a particular device or type of device has been blocked or clogged by flood debris or sediment, use of such devices should be avoided.

ASCE 24: Commentary pg. 45
The Wagner's were flooded out for 6 weeks. But their home was protected because of their no quit attitude.
After the water receded *Still Standing*
January 2016 Yet Again
Questions ?