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Flood Insurance and Other Natural Disaster Coverage:
What You Don't Know Can Cost You

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Agenda

Topics of Discussion:

1. FEMA's Flood Map Modernization Program
2. Levee and Dams
3. Sources of Flood Insurance
4. Proactive Flood Risk Management
5. Case Studies

FEMA's Flood Map Modernization

Multi-Year Flood Map Modernization Program

- “Map Mod”
 - 2003-2008
 - \$1 billion investment
 - Create digital flood mapping platform
 - Make flood data readily available to public stakeholders
 - Remapping projects range from 1 to 7 years
 - Prioritize projects based on risk and population
 - Incorporate more accurate flood data wherever available
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- Goal: 80,000 new maps for 92% of U.S. population

 - Reality: 40,000 new maps for 46% of population

FEMA's Flood Map Modernization

Flood Risk Mapping, Assessment and Planning Program

- “Risk MAP”
 - 2009-2014
 - \$220 million investment – 2009 & 2010 only
 - Focus on high risk coastal, levee and other riverine areas
 - Update maps every 3-5 years
 - Improve quality of flood data
 - Improve public outreach, education and mitigation
 - Improve interaction with other agencies and programs
 - Federal, state, tribal and local agencies
 - USACE, USGS, US Fish and Wildlife, NOAA, Census
 - National Dam Safety Program and National Hurricane Program
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- Reality: need to finish Map Mod first – 30,000 maps left

FEMA's Flood Map Modernization

Map updates are driven by three principal factors:

- **Physical changes to the floodplain:**
 - Flood control devices such as culverts, levees, dams
 - Development such as subdivisions and roads
 - Natural changes such as erosion or wildfires
- **Climate changes:**
 - Changing rainfall and surge data – new 100-year storms
 - Hurricane patterns and intensities
- **Engineering methodology changes:**
 - Improved data collection
 - Improved computer modeling applications
 - Better understanding of the physics of storm surges and major flooding events

FEMA's Flood Map Modernization

How should I manage these issues?

- Be proactive, not reactive
- Identify the correct zone on current flood map
- Identify and monitor how re-mapping projects will impact your properties
- Before new maps take effect determine how new maps will impact your bottom line
- Timing is everything to protect and maximize asset values
- If going into SFHA:
 - Budget in advance for new NFIP policies
 - Properly time the purchase the policies to minimize premiums and prevent uninsured losses
 - Evaluate flood zone correction opportunity
- If coming out of SFHA:
 - Confirm property policy provides coverage
 - Eliminate NFIP policies

Levees and Dams

Key Facts from FEMA:

- 22% of the nation's 3,147 counties have levees
- 43% of the U.S. population lives in counties with levees
- 30% of counties being remapped have levees shown on their flood map
- USACE has authority over 2,000 federal levee systems, totaling over 14,000 miles of infrastructure
- FEMA and USACE estimate there are over 100,000 miles of non-federal levee systems
- There are over 84,000 dams in the U.S.

Levee Designations

- Accredited:
 - certified to provide 90% assurance of containing 100-year flood
 - zones B, C, X-shaded, X-unshaded
- Provisionally Accredited:
 - was shown as accredited on most recent map
 - 2 years to deliver certification documentation
 - zones B, C, X-shaded, X-unshaded
- De-Accredited:
 - no longer meets certification standard
 - zones AE, A, AH, AO, AR, A99
- Not Accredited:
 - don't know if meets certification requirement
 - zones AE, A, AH, AO

Levee News

- New flood zone classifications
 - AL
 - XL
- De-Accreditations happening every day
 - Only 300 Accredited levee systems
 - 1,700 offered PAL status
 - Over 175 levee systems already de-accredited
 - 2 year periods end every day, more de-accreditation will follow
- Consider buying NFIP policies for properties protected by levees regardless of zone classification

Sources of Flood Insurance

- Master Property Policy
 - Know your deductibles by zone
 - Know your sub-limits by zone
 - 5% Named Storm deductible
- National Flood Insurance Program
 - \$250,000 residential / \$500,000 non-residential
 - Rules and rates updated 5/1 and 10/1
 - Lots of changes in the works
- Excess Flood Carriers
- Be Careful: Identify Coverage Gaps

Proactive Flood Risk Management

Why should I be proactive?

- Standard flood zone determinations are not enough
- 100-year flood is an insurance standard, not a true risk standard
- Maximize the value for every dollar you spend on flood insurance
- Prevent uninsured losses
- Maximize NOI and asset values

What should I do?

- Detailed flood risk analysis on all buildings in your portfolio
- Identify high-risk buildings that necessitate NFIP policies
- Identify buildings erroneously designated in high-risk zones and perform flood zone correction to eliminate unnecessary NFIP policies
- Identify all properties where re-mapping projects are underway or scheduled
- Monitor all re-mapping projects to determine in advance how they will affect your bottom line and asset values
- Identify mitigation opportunities to reduce risk of loss

Multifamily Case Study

- We have engaged Flood Zone Correction, Inc. (FZC) to review several properties supposedly located in the A zones. They have determined in most cases that developers building structures after the mid-1980's have been required by local ordinances to build in a "flood safe" manner that enables their buildings to qualify for removal from A zones.
- FCZ has petitioned FEMA on our behalf for a re-zoning decision which has usually been granted in the form of a Letter of Map Amendment (LOMA) or Letter of Map Revision (LOMR).
- Following the issuance of the LOMA/LOMR, we have been able to drop the Federal flood insurance on the properties which has resulted in significant savings and added property values.

<u>Property Name</u>	<u>Buildings Removed</u>	<u>Premium Saving</u>	<u>Cap Rate</u>	<u>Annual Capitalized Value</u>
Property A	11	\$16,896	7.5%	\$ 225,280
Property B	14	\$ 6,524	7.5%	\$ 86,987
Property C	24	\$ 8,712	7.5%	\$ 116,160
Property D	18	\$ 6,534	7.5%	\$ 87,120
Property E	46	\$15,538	7.5%	\$ 207,173
Property F	13	\$13,000	7.5%	\$ 173,333
Property G	14	\$ 5,008	7.5%	\$ 66,773
Property H	<u>10</u>	<u>\$ 3,050</u>	<u>7.5%</u>	<u>\$ 40,667</u>
Totals	150	\$75,262	7.5%	\$1,003,493

Flood Insurance Case Study

Cost Savings for having a property re-zoned

Property Description: Class A Office building

Flood zone: A (before LOMA was issued)

Flood Insurance Premium for 1 year: \$17,727

- FZC petitioned FEMA on our behalf to remove the office building out of flood zone A. The rezoning was successful, changing the flood zone from A to X. By eliminating the need to purchase federal flood insurance, an expense of \$17,727 per year was saved.
- The property is more competitive in the market for tenants. The property is in a “net” market, meaning rental rates are quoted on a net basis, and tenants pay their pro rata share of all operating expenses.
 - The operating expenses have been reduced by \$.09/sf, offering tenants a more competitive “gross” rent, thereby possibly attracting additional tenants.
 - If the operating expenses are already otherwise in-line with the market, the savings could actually allow an increase in net rents by the savings amount, adding directly to the net operating income.
- The property has additional net operating income as a result of the savings. Because this is a net market, tenants do pay most of the expense; however, there was currently vacancy of roughly 20% at the property. Therefore, 20% of the expense will not be reimbursed by tenants and will be a direct hit to the NOI.
 - If a 20% vacancy is assumed, the NOI increases by \$3,550 by not having the expense. At a capitalization rate of 8%, this actually creates roughly \$44,000 of property value ($\$3,550 / .08 = \$44,371$).
 - Over the life of the hold (assuming 5 years), the property would have an additional \$17,750 of cash flow, as well as additional sale proceeds (potentially \$44,000).
- **Conclusion:** By eliminating the flood insurance expense the property benefits by lowering its cost per square foot, thus becoming more attractive to tenants, as well as increasing the property’s NOI. Overall, the **property saves \$62,121 over the life of the property** (\$44,371 from the increased NOI and \$17,750 from additional cash flow).

Thank You. Any Questions?

For copies of this presentation or additional information:

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