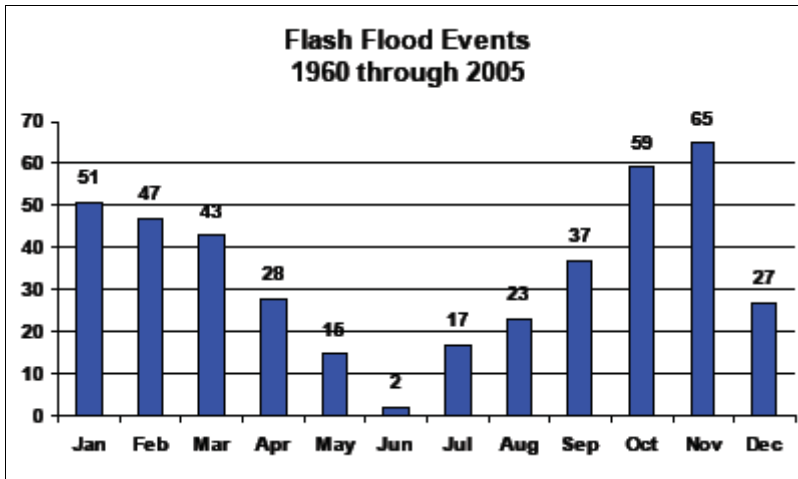




Wai Halana

Hawaii Flood News

Hawaii Rainy Season



As hurricane season starts to wind down, another season is just getting started. Rainy season in Hawaii runs from October through April.

According to the National Weather Service (NWS) in Hawaii, between 1960 and 2005 flash flood events have occur an average of eight times per year. Historically, the months of October and November have experienced the highest flash flood event frequency. NWS statistics indicate that flash floods are the leading cause of direct weather-related deaths in the State of Hawaii, far exceeding the toll caused by high wind events and tropical cyclones.

Turn Around Don't Drown™ is a NOAA National Weather Service campaign to warn people of the hazards of walking or driving a vehicle through flood waters. Most flood-related deaths and injuries could be avoided if people who come upon areas covered with water followed this simple advice: **Turn Around Don't Drown™**.

The reason that so many people drown during flooding is because few of them realize the incredible power of water. A mere six inches of fast-moving flood water can knock over an adult. It takes only two feet of rushing water to carry away most vehicles. This includes pickups and SUVs.

If you come to an area that is covered with water, you will not know the depth of the water or the condition of the ground under the water. This is especially true at night, when your vision is more limited.

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Wai Halana is published quarterly by the Department of Land and Natural Resources (DLNR), Engineering Division. It is supported by the Federal Emergency Management Agency (FEMA) under the Community Assistance Program. The contents of this publication is to increase awareness about the National Flood Insurance Program. The authors and publisher are solely responsible for the accuracy, and do not necessarily reflect the views of DLNR or FEMA.



The current and selected past issues are also available at:

www.hidlnr.org/eng/nfip

We welcome your comments and suggestions, as well as, newsworthy articles. Your submissions may be sent to the Department of Land and Natural Resources, Engineering Division, P.O. Box 373, Honolulu, Hawaii 96809. If you'd like to receive Wai Halana via email or wish to be removed from our mailing list, contact Elaine Keb at (808) 587-0227.

Continued from Page 1, "Hawaii Rainy Season"

Play it smart, play it safe. Whether driving or walking, any time you come to a flooded road, **TURN AROUND, DON'T DROWN!**

Follow these safety rules:

- Monitor the NOAA Weather Radio, or your favorite news source for vital weather related information.
- If flooding occurs, get to higher ground. Get out of areas subject to flooding. This includes dips, low spots, canyons, washes etc.
- Avoid areas already flooded, especially if the water is flowing fast. Do not attempt to cross flowing streams. **Turn Around Don't Drown™**
- Road beds may be washed out under flood waters. NEVER drive through flooded roadways. **Turn Around Don't Drown™**
- Do not camp or park your vehicle along streams and washes, particularly during threatening conditions.
- Be especially cautious at night when it is harder to recognize flood dangers.

Source: National Weather Service



Compare Risks

Source: Flood Safety Education Project
<http://floodsafety.com/national/property/index.htm>

Your chances of being flooded are much greater than some other risks you face daily. If you live in a 100-year floodplain, there is more than a 1 in 4 chance that you will be flooded during your 30-year mortgage. During a 30-year mortgage period you are 27 times more likely to experience a flood than having a fire.

Event	% chance of happening during the next year
25-year flood	4 chances in 100
Involved in a car accident	3 chances in 100
Some form of cancer	3 chances in 100
Victim of larceny	2 chances in 100
50-year flood	2 chances in 100
Victim of burglary	1 chance in 100

Event	% chance of happening during the next year
Injured in a car accident	1 chance in 100
100-year flood	1 chance in 100
Victim of auto theft	1 chance in 300
Victim of aggravated assault	1 chance in 500
Victim of robbery	1 chance in 1,000
Residential Fire	4 chances in 10,000

Free of Obstruction Rating in VE Zones (Coastal Floodplains)



The NFIP Flood Insurance Manual states that open wood lattice or insect screening below the lowest elevated floor of elevated Post-FIRM buildings, located in V zones, are not considered as obstructions so long as they meet the performance requirements of Section 60.3(e)(5) of the NFIP regulations. To increase the likelihood that the screen or latticework will collapse as intended, without transferring loads to the building or its foundation, FEMA recommends that the vertical framing members on which the screen or latticework is mounted (such as 2x4's) be spaced at least 2 feet apart. Either metal or synthetic insect screening is acceptable. Lattice is available in 4'x8' sheets in wood or plastic, and both are acceptable. The material used

to fabricate the lattice should be no thicker than 1/2 inch, and the finished sheet should have an opening ratio of at least 40 percent. Buildings with open wood or plastic lattice or insect screening that meet the above criteria are rated using the "Free of Obstruction" rates.

FEMA understands that some buildings in V zones have designs for privacy screening that provide for an opening ratio of at least 40 percent using horizontal or slanted wood slats or shutters. The wood slats and shutters are breakaway and purely cosmetic in nature, serving the same purpose as lattice.

FEMA has determined that wood slats and shutters used as privacy screening can be considered to perform as latticework and allow the building to be rated as "Free of Obstruction," provided that the following criteria are met:

- Shutters or wood slats have a thickness no greater than 1 inch.
- Opening ratio of at least 40 percent.
- No machinery or equipment is below the lowest elevated floor unless it is above Base Flood Elevation.

Any construction that does not meet the above criteria must be treated as a non-supporting breakaway wall, and a registered professional engineer or architect must certify that the design meets the conditions of 44CFR 60.3(e)(5)(i) and (ii). Such construction practices should be rated using the "With Obstruction" rates.



Source: FEMA, Underwriting Section (memo W-04018)

To download the original memorandum, click [here](#)

What is an Enclosure?

What Is an Enclosure? An "enclosure" is formed when any space below the BFE is enclosed on all sides by walls or partitions. A V-zone building elevated on an open foundation (see Fact Sheet No. 11), without an enclosure or other obstructions below the BFE, is said to be free-of-obstructions, and enjoys favorable flood insurance premiums (a building is still classified free-of-obstructions if insect screening or open wood lattice is used to surround space below the BFE). See [FEMA Technical Bulletin 5-93, Free of Obstruction Requirements](#) for more information.

Enclosures can be divided into two types, breakaway and non-breakaway.

- Breakaway enclosures are designed to fail under Base Flood conditions without jeopardizing the elevated building – any below-BFE enclosure in a V zone must be breakaway. Breakaway enclosures are permitted in A zones but must be equipped with flood openings.

Continued on Page 8

Recommend Flood Insurance to Every Client

Rita Hollada, CIC, CPCU, CIA

Flooding is the most common natural disaster in the United States. Yet every time there is a flood event, the media highlights the victims who chant in unison that they never knew that flooding was not covered by their homeowners insurance. Eventually, state insurance departments receive complaints, and legislators promise investigations. Finally, errors and omissions lawsuits are filed and agents find themselves trying to defend against two major allegations. They will be accused either of failing to advise clients to purchase flood insurance or of failing to advise clients of the limitations of flood coverage under the standard homeowners policy. It is a cycle that cannot continue. There is no longer an excuse every insurance agent needs to know about flood insurance. Period.

That said, the first thing every agent needs to appreciate is just how broad the water damage exclusion is in most property insurance policies. It is more than a "flood" exclusion; it is an exclusion for all damage done by the overflow of a body of water, tidal water, waves, surface water, or flood, regardless of the source or proximate cause. The exclusion also applies to spray from any of these water events, whether or not driven by wind.

The definition of flood as found in the flood policies issued through the NFIP is far more liberal. The Flood Insurance Manual defines flood as partial or total inundation of normally dry land by water from virtually any source. It even includes "mudflow," which is described as a river of mud. These events are far more expansive than what one would normally think of as a "flood." The surface water or mudflow could be caused by a sudden downpour or the rupture of a water main, and definitely by a storm surge, regardless of the proximity to a body of water. By understanding the breadth of this definition, agents should appreciate that every client has a risk of being flooded. The only real question is "How great is that risk?"

Risk Assessment and Coverage Limitations

The NFIP provides a number of easy-to-use tools to help agents (and prospective policyholders) determine the degree of risk. One source of information is the NFIP's FloodSmart website (www.FloodSmart.gov). At this website it is possible to easily assess a risk by clicking on the "What is your risk?" button in the upper right corner of the home page and then entering a property address in the next screen. On this page, you can also use the "Test the waters" button to get dollar estimates of prop-

erty damage based on various flood depths. It is even possible to view the appropriate flood map segment online to see the location of a property and its designated flood risk zone.

A flood zone determination provided by one of the numerous flood zone determination companies could also quickly determine risk. Once the flood risk level is known, an agent is in a good position to accurately discuss risk and coverage needs with a prospect or client. Now the person can make an informed decision about the purchase of flood insurance. More importantly, the agent can document that the conversation occurred and secure a signature, if flood insurance is rejected. ACORD provides Form 60, the Flood Insurance Notice/Rejection form, which is ideal for this purpose. You can access this online through ACORD's form page:

www.cordadvantage.org/forms/forms.aspx

When the agent begins to discuss with a client the purchase of a flood insurance policy, it is important to stress the limited coverage provided by various flood forms. Some standard carriers will offer flood as a covered peril on some commercial property and inland marine forms. However, it is important to research the actual policy language because coverage can be limited. For example, some forms will not extend to properties in an "A, V, or shaded X zone." Agents need to know the significance of this language and realize that any policy that covers flood except properties located in an "A, V, or shaded X zone" is not covering much!

In the "Zone"

Every community participating in the NFIP has been extensively mapped to identify hazard areas. These are known as flood zones. Areas with the greatest risk of flooding are known as Special Flood Hazard Areas (SFHAs) and are designated as A or V zones on the maps. SFHAs have a 1-percent chance of flooding in any given year. The X zones (formerly called B and C zones) are moderate- or minimal-hazard areas. A shaded X zone is perceived to have a greater likelihood of flooding than an unshaded X zone, although statistics do not actually confirm that.

Flood policies offered by the NFIP provide coverage to insured property, regardless of flood risk zone. The zone determination, however, does affect the rating criteria and construction requirements of the individual property.

Every property is individually rated in the NFIP, according to its date of construction, building type, and use, as well as its risk zone. Buildings in SFHAs must be elevated to a required minimum height above the floodplain if constructed after the establishment of the Base Flood Elevation posted on the community's flood map.

Coverage Limitations

Every agent needs to realize that the policy provided by the NFIP Servicing Agent or the contracted WYO companies is a limited contract. Assumptions relative to other types of insurance contracts cannot be made. The flood policy covers one thing and one thing only direct damage by or from flood, as defined. In fact, the explanation requires that the damaged property have undergone some physical change as a result of the floodwaters. There is no coverage for consequential damage, indirect damage, financial loss, loss of use, additional living expenses, or extra expense. These losses are clearly excluded in the policy.

Additionally, there is no coverage for many types of property, including finished structure or personal property in a basement or under an elevated building, underground structures, decks or walkways outside the perimeter walls of a building, or any property in the open. Coverage is very limited for valuable items such as jewelry, antiques, or art. With regard to business personal property, there is no coverage for the property of others in the care, custody, or control of the policyholder.

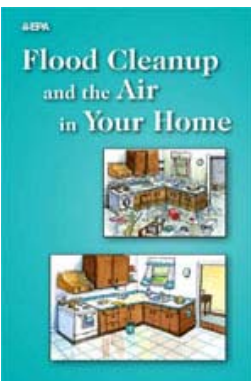
Finally, agents need to explain the settlement conditions of NFIP policies. Most claims will be settled on an Actual Cash Value basis. This includes all personal property and all structures except for a single-family primary residence. The single-family primary residence may be eligible for a settlement based on the replacement cost with like kind and quality of structure items if it is insured to at least 80 percent of its replacement cost at the time of the loss. This is not an agreed value and definitely not guaranteed replacement cost. The maximum amount to be paid will be the amount of insurance.

The main lesson to be learned about flood is that every insurance client is at risk for flooding. Coverage for this most common event is principally available through the NFIP, which provides a limited coverage form. There is no promise of full indemnification; coverage is limited to insured structures and certain types of personal property. The only way to understand the full scope of the coverage is to read and study carefully the Flood Insurance Manual and the policy form. Complete information about the NFIP is available at the FEMA website (www.fema.gov/business/nfip/). Spend the time now to avoid the problems later.

Rita Hollada, CIC, CPCU, CPIA, is a member and has served as the Chair of the Flood Insurance Producers National Committee. She works closely with the staff of the NFIP on producer issues and as a liaison to the producer community. She is a member of the National Faculty of the CIC program and often works as a consultant to insurance agencies and companies. She can be reached at rita@insprofs.com.

Spotlight features informative publications which are available to the public free of charge.

Flood Cleanup and the Air in Your Home



During a flood cleanup, the indoor air quality in your home or office may appear to be the least of your problems. However, failure to remove contaminated materials and to reduce moisture and humidity can present serious long-term health risks. Standing water and wet materials are a breeding ground for microorganisms, such as viruses, bacteria, and mold. They can cause disease, trigger allergic reactions, and continue to damage materials long after the flood.

For basic information on how to clean up after a flood and how to prevent indoor air problems download this fact sheet from the Environmental Protection Agency.

<http://www.epa.gov/mold/flood/index.html>

NOTE: We offer this publication information for reference only. We do not endorse any product or company. Please note website links may have changed since the publication of this newsletter.

Flood Insurance Rate Maps Updates



Let's take a closer look into Hawaii County's FIRM panel 0713D. This panel covers the areas surrounding portions of:

Keopu Drainageway
Hienaloli Drainageway, and
Waiaha Drainageway.

Did you know FEMA has approved seven Letter of Map Revisions for this panel?

A Letter of Map Revision (LOMR) is FEMA's modification to an effective Flood Insurance Rate Map (FIRM), or Flood Boundary and Floodway Map (FBFM), or both. The LOMR officially revises the Flood Insurance Rate Map (FIRM) or Flood Boundary and Floodway Map (FBFM), and sometimes the Flood Insurance Study (FIS) report, and when appropriate, includes a description of the modifications. The LOMR is generally accompanied by an annotated copy of the affected portions of the FIRM, FBFM, or FIS report.

FEMA Case No.	Effective Date of Revision
06-09-B685P	1/11/2007
03-09-1333P	2/27/2004
03-09-1531P	1/20/2004
02-09-1456P	4/24/2003
01-09-882P	8/7/2001
95-09-498P	6/14/1995
93-09-503P	5/26/1995



FEMA

Hurricane Flood Insurance Risk Study

Coastal property owners be prepared. FEMA is currently studying the hurricane risk to 448 miles of our southern shorelines and will be updating their Flood Insurance Rate Maps (FIRMs).

Island	Western Limit	Eastern Limit	Reach Length (Miles)
Hawaii	Upolu Point	Cape Kumukahi	193
Kauai	Nohili Point	Kuaehu Point	56
Lanai	Kaumalapau	Manele	16
Maui	Honokahua Bay	Koali	69
Molokai	Ilio Point	Cape Halaawa	54
Oahu	Kaena Point	Kawaihoa Point	60

Except for the County of Kauai, the coastal flood hazards depicted on the current FIRMs reflect tsunami-induced flooding. The tsunami run-up profiles and inundation areas were based on a 1974 study by Bretschneider and Wybro, entitled: "Tsunami Inundation Prediction". Tsunami wave elevations were based on the U.S. Army Corps of Engineers, Waterways Experiment Station's Technical Report, "Tsunami-Wave Elevation Frequency of Occurrence for the Hawaiian Islands (August 1977)".

The south shores of our islands have greater impact from storm surges due to hurricanes. Thus, the reason FEMA is conducting the Hawaii Hurricane Flood Insurance Risk Study. FEMA will be utilizing data from at least 13 historical storm tracks, starting with Hurricane Hiki in 1950 to determine the 1% chance event. Results from this study will be compared to the tsunami-induced flooding from the effective FIRMs. The revised FIRMs will reflect the "worst case" flood hazard.

It may be time to consider purchasing flood insurance. The NFIP's grandfathering provision offers savings for structures that were built before a flood map was issued for the community, or that were built in compliance with the flood map in effect at the time of construction. The simplest way to grandfather is to purchase a flood insurance policy before the new map takes effect and maintain coverage without a lapse.

Elevation Certificate FAQ



A new feature to our NFIP website is the "Frequently Asked Questions" (FAQ) page which currently posts common questions about filling in FEMA's Elevation Certificate Form.

Click [here](#) to check it out.



(www.hidlnr.org/eng/nfip/Faq.aspx)



More info on the Grandfathering Rule, click [here](#)



NFIP premiums will increase an average of 6.0 percent for policies written or renewed on or after May 1, 2007. Although rates for subsidized policies will increase 7.0 percent, premiums for actuarially rated policies will rise only 5.4 percent as a result of leaving the rates for Preferred Risk Policies unchanged while increasing the premiums for Standard X-Zone policies and actuarially rated Special Flood Hazard Area policies an average of 7.4 percent. Premium increases vary by flood-risk zone as described below.

V Zones
(coastal high-velocity zones)

Larger rate increases are being implemented again this year (1) due to an increased contingency loading (from 10 percent to 20 percent) that more appropriately reflects the volatility in flooding and (2) in response to the Heinz Center's Erosion Zone Study, which clearly indicates that current rates significantly underestimate the increasing hazard from steadily eroding coastlines.

- Post-FIRM V Zones: Premiums will increase 10 percent.
- Pre-FIRM V Zones: Premiums will increase about 9.5 percent.

A Zones
(non-velocity zones, which are primarily riverine zones)

There will be large increases this year.

- Post-FIRM AE Zones: Premiums will increase about 6 percent as indicated by the NFIP's actuarial rate model, which includes

May 2007 NFIP Rate Changes

an increase in the contingency loading from 5 percent to 10 percent.

- Pre-FIRM AE Zones: Premiums will increase about 7 percent, which will help to reduce the amount of the subsidy in these rates.
- AO, AH, AOB, and AHB Zones (shallow flooding zones): Premiums will be increased between 9 percent to 10 percent.
- Unnumbered A Zones (remote A Zones where elevations have not been determined): Premiums will increase about 8 percent. These increases are designed to keep rates in line with Post-FIRM AE Zones.
- A99 Zones (approved flood mitigation projects such as levees, still in the course of construction): Premiums will increase about 10 percent.
- AR Zones: Premiums will increase about 10 percent.

X Zones
(zones outside the Special Flood Hazard Area)

Moderate increases are being implemented.

- Standard Risk Policy: Premiums will increase about 10 percent.
- Preferred Risk Policy: No changes.

Mortgage Portfolio Protection Program

Rates have been revised to keep them in line with increases to A and V Zone policies.



Source: Watermark



Hawaii Floodplain Manager's Conference

Ironically, as Hurricane Flossie approached the Big Island of Hawaii, Floodplain Manager's throughout the State gathered in Kona for the 3rd Annual Hawaii Floodplain Manager's Conference at the Sheraton Keauhou Bay Resort on August 15th and 16th. The two day conference, attended by approximately 30 participants from the Federal, State, local, and private sector, discussed topics and issues relating to the National Flood Insurance Program regulations and FEMA mapping efforts.

Thank you to all participants for making this conference a success !!!

Save the Date

The 4th Annual Hawaii Floodplain Manager's Conference will be held August 13 and 14, 2008 on the island of Kauai



*Make Hawaii a Great
Place to Live !*

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Continued from Page 3, "What is an Enclosure?"

- Non-breakaway enclosures, under the NFIP, can be used in an A zone (they may or may not provide structural support to the elevated building), but they must be equipped with flood openings to allow the automatic entry and exit of floodwaters. The Home Builder's Guide to Coastal Construction recommends their use only in A zone areas subject to shallow, slow-moving floodwaters without breaking waves.

Enclosures are strictly regulated because, if not constructed properly, they can transfer flood forces to the main structure (possibly leading to structural collapse).

Other considerations:

- Owners may be tempted to convert enclosed areas below the BFE into habitable space, leading to life-safety concerns and uninsured losses. Construction without enclosures should be encouraged. Contractors should not stub out utilities in enclosures; utility stub-outs make it easier for owners to finish and occupy the space.
- Siding used on non-breakaway portions of a building should not be extended over breakaway walls. Instead, a clean separation should be provided so that any siding installed on breakaway walls is structurally

independent of siding elsewhere on the building. Without such a separation, the failure of breakaway walls can result in damage to siding elsewhere on the building.

- Breakaway enclosures in V zones will result in substantially higher flood insurance premiums
- If enclosures are constructed in A zones with the potential for breaking waves, open foundations with breakaway enclosures are recommended in lieu of foundation walls or crawlspaces. If breakaway walls are used, they must be equipped with flood openings that allow flood waters to enter the enclosure during smaller storms. Breakaway enclosures in A zones will not lead to higher flood insurance premiums.



Source: FEMA 499, Technical Fact Sheet No. 27

FEMA's Home Builder's Guide to Coastal
Construction, Technical Fact Sheet Series

FEMA 499
August 2005

Download [here](#)

http://www.fema.gov/rebuild/mat/mat_fema499.shtm

