Department of Land and Natural Resources
Engineering Division

July 2008

Wai Halana

Hawaii Flood News

THE TOP THREE HURRICANE PROTECTION MYTHS

And Why Believing Them Can Be Dangerous

Gearing up for hurricane season can often mean well-intentioned friends and relatives will provide you with their own tips and advice. The Institute for Business & Home Safety wants to help residents in vulnerable states avoid some potentially dangerous ideas, by identifying The Top Three Hurricane Protection Myths.

Hurricane Season

June 1st - November 30th

1. Open the windows so the air pressure doesn't explode the house.
This would not only be unsafe for you and your home, but it would also allow wind-driven rain to stream through your house and ruin belongings. The normal leakage of air around windows and doors will tend to keep the pressure in your house slightly lower than the atmospheric pressure caused by the storm outside. The greatest danger comes when a large window or door fails on a wall facing the wind. The key is keeping all wind and water out with proper opening protection.

2. You only need to protect the openings facing the ocean or gulf.
Because hurricanes are a moving, rotating storm, winds can come from any direction, which can change rapidly if you are near the eye. Your best bet is to protect windows and doors on all sides of your home.

3. You should tape windows with a big "X."
Taping glass does nothing to address the main point of protection – keeping the glass in its frame and securely attached to the home.

Remember – never lean or push against a window or door that is being blown inward by wind pressure. And no matter what kind of glass you have, stay away from all windows during a severe storm.

Source: Institute for Business & Home Safety

Featured Articles ...

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The current and selected past issues are also available at:

www.hawaiinfip.org

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.

Upcoming Events

Floodplain Management Association Annual Conference
September 2-5, 2008
Paradise Point Resort
San Diego, California
For more info: www.floodplain.org

Certified Floodplain Managers Exam
August 14, 2008
1:30 - 4:30 pm
Hilton Kauai Beach Resort

To register to take the exam, visit the Association of Floodplain Manager's website at: www.floods.org. Deadline to apply for the exam: July 25, 2008.

Hawaii Dam Safety Seminars
Hawaii: October 20-21, 2008
Maui: October 23-24, 2008
Oahu: October 27-29, 2008
Kauai: October 30-31, 2008

The Department of Land and Natural Resources is hosting a series of Dam Safety Seminars. Learn valuable dam safety training and recent dam safety inspection findings on your island.

For more info visit:
http://www.hidlnr.org/eng/ds/Seminars.aspx

Disaster Supplies Kit Maintenance

Source: FEMA

Just as important as putting your supplies together is maintaining them so they are safe to use when needed. Here are some tips to keep your supplies ready and in good condition:

- Keep canned foods in a dry place where the temperature is cool.
- Store boxed food in tightly closed plastic or metal containers to protect from pests and to extend its shelf life.
- Throw out any canned good that becomes swollen, dented, or corroded.
- Use foods before they go bad, and replace them with fresh supplies.
- Place new items at the back of the storage area and older ones in the front.
- Change stored food and water supplies every six months. Be sure to write the date you store it on all containers.
- Re-think your needs every year and update your kit as your family needs change.
- Keep items in airtight plastic bags and put your entire disaster supplies kit in one or two easy-to-carry containers, such as an unused trashcan, camping backpack, or duffel bag.

FACT SHEET

Living Behind Levees

Information for Property Owners

LEVEES
IDENTIFYING THE RISK

LEVEES: PROTECTION WITH RISK

The United states has thousands of miles of levees - usually earthen embankments, designed and constructed in accordance with sound engineering practices to contain, control, or divert the flow of water so as to provide protection from temporary flooding. Many levees were first put in place by farmers to protect agricultural areas from frequent flooding. Date back as much as 150 years. Others have been designed to protect urban areas, and were typically built to higher standards used by the U.S. Army Corps of Engineers. However, no levee provides full protection from flooding.

All levees are designed to provide a *specific level of protection,* and can be overtopped in larger flood events. Levees require regular maintenance to retain their level of protection. The fact is, levees can and do decay over time, and maintenance can become a serious challenge. When levees do fail, or are overtopped, they fail catastrophically - the flood damage may be more significant than if the levee was not there. For these reasons, the millions of people affected by levees need to understand the flood risks they face and take steps to address them.

FEMA'S ROLE

The Federal Emergency Management Agency (FEMA) manages the National Flood Insurance Program (NFIP), the cornerstone of the Nation's strategy for preparing communities for flood disasters. The NFIP was created to reduce flood damages by identifying flood risks, encouraging sound community floodplain management practices, and providing flood insurance.

FEMA is updating the Nation's flood hazard data and maps through an effort call Flood Map Modernization. Accurately identifying the flood risk behind the levees is an important element of Flood Map Modernization. Levees are present in over one quarter of the counties being remapped.

Continued on Page 5, "Living Behind Levees"

Federal Flood Control Projects	
Oahu	Kuliouou Stream
	Kawainui Marsh
	Kaneohe-Kailua Dam
	Kahawainui Stream
Kauai	Waimea Stream
	Hanapepe Stream
Hawaii	Alenaio Stream
	Paauau Stream
	Wailoa Stream
Maui	Kahoma Stream
	Iao Stream
	Kaunakakai Stream

Non-Federal Flood Control Projects	
Oahu	Niu Stream
	Hahaione Stream
	Kuliouou Stream
	Maunawili Stream
	Omao Stream
	Moanalua Stream
	Aiea Stream
	Kalauao Stream
	Keaahala Stream
	Pearl City Stream
	Waimalu Stream
Hawaii	Keopu Stream
	Waiakea Uka Stream

Where are Hawaii's Levees Located ??

According to the U.S. Army Corps of Engineers, Honolulu District's inventory, Hawaii has 12 Federal Flood Control Projects (FCP) and 13 non-Federal FCP in the PL 84-99 Rehabilitation Inspection Program. Portions of these projects, incorporate a levee. The Federal Emergency Management Agency (FEMA) requires that these levees be certified as providing protection against the 1% annual chance flood in order to maintain a moderate risk designation behind the levees on FEMA's Flood Insurance Rate Maps (FIRM). If accreditation cannot be achieved, a specified area behind the levee will be designated as a high risk area and flood insurance will be required.

Source: U.S. Army Corps of Engineers, Honolulu District

Senate Approves Renewal of Flood Insurance Program

Associated Press

Tuesday May 13, 2008
By Jim Abrams, AP Writer

WASHINGTON (AP) — The Senate agreed Tuesday to write off — and hand over to taxpayers — more than $17 billion in debt that a FEMA flood insurance program accumulated after being devastated by Katrina and other 2005 hurricanes.

The bill to extend the National Flood Insurance Program for five years also includes measures, such as increasing premiums and reducing subsidies, aimed at putting the 40-year-old program on a better financial footing.

The 92-6 vote sends the bill to negotiations with the House, which passed similar legislation last September. With the 2008 hurricane season officially starting on June 1, there's motivation to move quickly to resolve differences and get the bill to the president's desk.

The highlight of the Senate bill is the forgiving of some $17.5 billion in debt that the Federal Emergency Management Agency, which runs the program, owes the Treasury. That action adds to what taxpayers owe in terms of the federal debt.

But lawmakers from both parties were in agreement that this was necessary considering the exceptional circumstances resulting from Katrina. Senate Banking Committee Chairman Christopher Dodd, D-Conn., said that FEMA would be forced to raise premiums to the 5.5 million policyholders if it were forced to continue paying interest on the debt to the Treasury.

The flood program was created to help homeowners and businesses situated in flood-prone regions get affordable insurance not usually available from the private insurance market.

The House bill differs from the Senate legislation in extending the program to cover wind damage. There were widespread complaints after Katrina that private insurers with wind coverage were judging damage from the hurricanes to be the result of flood, rather than wind, so as to shift the burden of compensation to the federal program.

The White House said that any bill including wind coverage would face a presidential veto, saying that "shifting liabilities for windstorm damage from the private sector to the NFIP would be fiscally irresponsible."

Sen. Roger Wicker, R-Miss., with Louisiana senators, offered an amendment to the Senate bill that would have provided optional wind coverage, but it was defeated 73-19. Wicker said he would continue to push for the change: "The status quo is not working and the federal government must act now to fix this inequity."

Sen. Mary Landrieu, D-La., won acceptance of a provision to expand the functions of the program's customer service office to investigate potential instances of fraud and abuse and ensure that private insurers are acting in good faith.

The Senate bill also:

- Requires people protected by dams or levees to buy flood insurance after floodplain mapping is completed.
- Allows FEMA to raise rates by 15 percent annually, up from 10 percent, and increases minimum deductibles.
- Gradually ends subsidies now available to some second homes, commercial properties and properties that experience repeated losses.
- Requires FEMA to adjust rates to accurately reflect risk upon completion of flood insurance rate maps.

The bill is H>R. 3121.

Source: Associated Press
http://ap.google.com/article/ALeqM5jo9KG6u_eDeu1rbFj4uzylgAosZwD90KS6D81

Continued from Page 3, "Living Behind Levees"

FLOOD HAZARD MAPS IDENTIFY THE RISKS

Flood hazard maps (also known as Flood Insurance Rate Maps, or FIRMs) show the high-risk areas where there is a 1-percent chance of flooding in any given year. They also indicate the low-to-moderate risk areas with a less than 1-percent annual-chance of flooding.

Assessing flood risk for areas behind levees is complex. Among the many factors the assessment must take into account are the actual elevations that a 1-percent-annual-chance flood will reach and the ability of the levee to contain such floodwaters. FEMA has criteria for recognizing levees as protecting against the 1-percent-annual chance flood. The levee owner is responsible for providing documentation to show that the levee meets these criteria. Note that FEMA does not examine structures or systems to determine how they will perform in a flood event.

If a levee meets FEMA criteria, the flood hazard map will show the area behind the levee as a moderate-risk zone. If it does not, the map will show the area as a high-risk area, or Special Flood Hazard Area (SFHA). The SFHA is the area subject to inundation by the 1-percent-annual-chance flood. The chart below shows how FEMA depicts these designations on flood maps and the requirements and options for flood insurance behind levees.

IF THE LEVEE...	THE FEMA FLOOD MAP WILL SHOW THIS FLOOD RISK...	AND THESE FLOOD INSURANCE REQUIREMENTS AND OPTIONS WILL APPLY
Is not currently shown as providing protection from the 1-percent-annual- chance flood. (Not Accredited)	**High flood risk**, with areas behind levees shown as being in a Special Flood Hazard Area (shown as Zones A, AE, AH, AO).	**Flood insurance is required** in high-risk areas as a condition of any federal financial assistance, including loans secured by buildings located in SFHAs from regulated or insured lending institutions. Your customers should be aware that Insurance rates may rise to reflect higher flood risk in these areas.
Provides protection from the 1-percent-annual- chance flood. (Accredited)	**Moderate flood risk**, but flooding is still possible (shown as Zones B, C, X, or X (shaded) on the map).	**The mandatory flood insurance purchase requirements of the NFIP do not apply** in Zones B, C, X, or X (shaded), but flood insurance is strongly recommended. **Lower-cost Preferred Risk Policies (PRP) are available** for most buildings in Zones B, C, X, or X (shaded).
No longer meets the minimum standards to be shown as providing protection from the 1-percent-annual- chance flood. (De-Accredited)	**High flood risk**, with areas behind levees shown as being in a Special Flood Hazard Area (shown as Zones A, AE, AH, AO).	**Flood insurance is required** in high-risk areas as a condition of any federal financial assistance, including loans secured by buildings located in SFHAs from regulated or insured lending institutions. **Grandfathering can save your customers money**. Buildings covered by flood insurance before the effective date of new maps can be grandfathered in at the current flood zone designation, as long as there is no lapse in coverage. Note: this coverage can be transferred.
Is temporarily shown as providing protection from the 1-percent-annual-chance flood while additional documentation is being gathered. (Provisionally Accredited)	**Moderate flood risk**. Areas behind levees are shown as being behind a Provisionally Accredited Levee, or PAL (shown as a Zone X (shaded) on the map pending accreditation).	**The mandatory flood insurance purchase requirements of the NFIP do not apply** in Zones B, C, X, or X (shaded), but **flood insurance is strongly recommended**. **Lower-cost Preferred Risk flood insurance is available** for most buildings in Zones B, C, X ,or X (shaded).

FEMA

For more detailed information about levees and flood risk zones, visit: www.fema.gov/plan/prevent/fhm/lv_intro.shtm

Flood Insurance Rate Maps *Updates*

Are you currently doing work in the Counties listed here? If so, please take note that FEMA has approved the following Letter of Map Revision (LOMR) for changes to the flood hazard information shown on the current effective FIRM.

Hawaii County

FIRM Panel 0870C / 0880C
Effective date of revision: August 8, 2008
FEMA Case No. : 08-09-0081P
Flooding Source: Waiakea Stream
Project ID: Puainako Street Extension
(Kaumana Drive to Komohana Street)

On-line reader can view LOMC here

FIRM Panel 0712C
Effective date of revision: March 25, 2008
FEMA Case No. : 08-09-0102P
Flooding Source: Keopu Drainageway
Project ID: Royal Kamehameha Garden
(Kona Mauka Estates)

On-line reader can view LOMC here

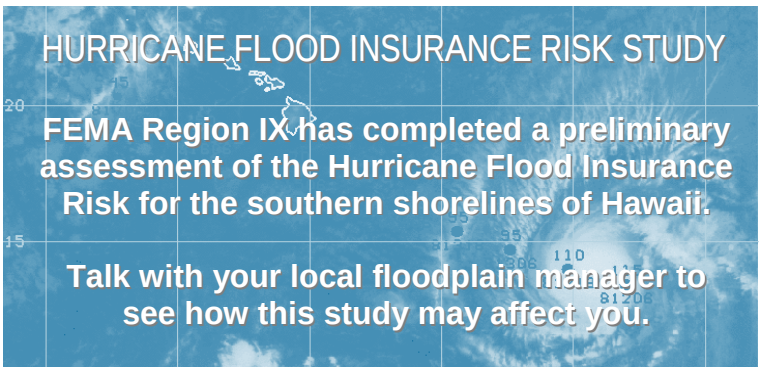
Maui County

FIRM Panel 0255B
Effective date of revision: March 25, 2008
FEMA Case No. : 07-09-0822P
Flooding Source: Waiakoa Gulch
Project ID: Kihei Residential Expansion

On-line reader can view LOMC here

FIRM Panel 0330B
Effective date of revision: February 29, 2008
FEMA Case No. : 08-09-0656P
Flooding Source: Pacific Ocean
Project ID: Makena Surf Property

On-line reader can view LOMC here



Updated Map Change Application Forms

The following application forms have been updated and are now available in the FEMA Library.

MT-EZ (Application Form for Single Residential Lot or Structure Amendments to National Flood Insurance Program Maps). This form is used to request that FEMA remove a single structure or a legally recorded parcel of land or portions thereof, described by metes and bounds certified by a Registered Professional Engineer or Licensed Land Surveyor, from a designated Special Flood Hazard Area via Letter of Map Amendment. The MT-EZ application and instructions can be downloaded from the FEMA Library at:

http://www.fema.gov/library/viewRecord.do?id=2328

MT-1 (Application Form for Conditional and Final Letters of Map Amendment and Letters of Map Revision Based on Fill). This form is used to assist requesters (community officials, individual property owners, and others) in gathering the information that FEMA needs to determine whether property (i.e., structure(s), parcel(s) of land) is likely to be flooded during the flood event that has a 1-percent chance of being equaled or exceeded in any given year (base, or 100-year, flood). The forms in this package may be used for property that has been inadvertently included in a V zone or the regulatory floodway. However, if the property is to be removed from a V zone, it must not be located seaward of the landward toe of the primary frontal dune. The MT-1 application and instructions can be downloaded from the FEMA Library at:

http://www.fema.gov/library/viewRecord.do?id=1492

MT-2 (Application Forms for Conditional Letters of Map Revision and Letters of Map Revision). This form is used for revisions to effective Flood Insurance Study reports, Flood Insurance Rate Maps, or Flood Boundary and Floodway Maps by individual and community requesters. These forms will provide FEMA with assurance that all pertinent data relating to the revision are included in the submittal. They also will ensure that:(a) the data and methodology are based on current conditions; (b) qualified professionals have assembled data and performed all necessary computations; and (c) all individuals and organizations affected by proposed changes are aware of the changes and will have an opportunity to comment on them. The MT-2 application and instructions can be downloaded from the FEMA Library at:

http://www.fema.gov/library/viewRecord.do?id=1493

Note: Fillable PDF of forms are available on the Hawaii NFIP Website (www.hawaiinfip.org)

FEMA's Risk MAP (Mapping, Assessment, and Planning) Strategy

FEMA has entered the final year of congressionally appropriated funding of the Flood Map Modernization Program. Upon completion, Map Modernization will provide reliable digital flood hazard data and maps for 92 percent of the Nation's population and easy access and sharing of that information.

In order to leverage the successes of Map Modernization and further enhance the usability and value of flood hazard mapping, FEMA has developed the Risk MAP Strategy. Risk MAP combines flood hazard mapping, risk assessment tools and Mitigation Planning into one seamless program. The intent of this integrated program is to encourage beneficial partnerships and innovative uses of flood hazard and risk assessment data in order to maximize flood loss reduction.

Hawaii's Newest Certified Floodplain Manager

The State of Hawaii has a new Certified Floodplain Manager (CFM). Mr. Frank J. DeMarco joins the ranks with 10 other Hawaii CFMs and becomes Hawaii County's first Certified Floodplain Manager.

Frank J. DeMarco. P.E., began working for the County of Hawaii, Department of Public Works, Engineering Division, on August 1, 2007. On March 3, 2008, Frank was assigned the Floodplain Manager duties for the County of Hawaii.

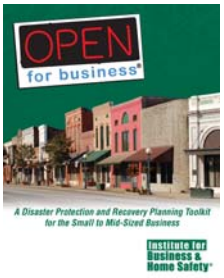
After leaving the Navy in 1974, Frank returned to college and in 1979, received a BS degree in Construction Engineering, from the School of Architecture, California Polytechnic State University, San Luis Obispo. Prior to his Hawaii employment, Frank worked for the State of California for 26 years with the Regional Water Quality Control Board and three years with CalTrans. Over the past 23-years, Frank also worked "side-jobs" as an engineering consultant. Since 1984, Frank has been a California Registered Civil Engineer and in February 2008, became registered in the State of Hawaii. On April 4, 2008, Frank became an ASFPM Certified Floodplain Manager.

Congratulations Frank !!!

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

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.

Open for Business



Open for Business® is a comprehensive disaster planning toolkit. The easy-to-use guide helps business owners reduce the potential for loss should disaster strike, and reopen quickly should they be forced to close. This creates a savings for the business, and also benefits the employees and customers who rely on it.

Open for Business® includes an assessment tool that helps the business determine its susceptibility to natural disasters wherever it has facilities and provides information to minimize damage. The toolkit also includes materials to help organize the business' critical information and review its essential operations, both of which lead to development of a continuity plan.

This publication can be found on-line at:

http://www.disastersafety.org/resource/resmgr/pdfs/OpenForBusiness_new.pdf

To request a free single copy of the toolkit, write to info@ibhs.org or call 1 (866) 657-IBHS (4247).

Source: Institute for Business and Home Safety

Make Hawaii a Great Place to Live !

Dept. of Land and Natural Resources
Engineering Division
P.O. BOX 373
Honolulu, Hawaii 96809

With Hurricane Season upon us and the Rainy season close behind, it's time to think about protecting your property with Flood Insurance. Remember homeowner's insurance doesn't cover for flood damage.

Different types of policies are available based on your property's location and flood history.

Standard Flood Insurance Policies - If you live in a community that participates in the NFIP, your building and its contents can be covered. You must apply for building coverage and contents coverage separately.

Preferred Risk Policies - If your home or business is in a low or moderate risk zone, your building may qualify for a low-cost Preferred Risk Policy. Premiums for both building and contents start at just under $119.

Don't Wait Until It's Too Late
Regardless of the type of policy you choose, there is a standard 30-day waiting period, from date of purchase, before a new flood policy goes into effect. The 30-day waiting period does not apply if:

- The initial purchase of flood insurance occurs in connection with the making, increasing, extension, or renewal of a loan in a high-risk zone by a regulated lender; or

- The initial purchase of flood insurance occurs within one year of a map change.

Don't delay.
Disaster can strike when we least expect it.
Floodsmart.gov