Department of Land and Natural Resources Engineering Division

January 2011

What are the Differences Between Tsunami Evacuation Zones and Flood Insurance Rate Maps?



Portion of a Flood Insurance Rate Map for the Poipu Area of Kauai

flood zones can be a result of localized rainfall, tropical storms, tsunamis, flash floods, or levee failure. FIRMs are used by communities to manage new development and promote sound land use in floodplains. FIRMs are also used to determine who may be required to purchase flood insurance and the rating of the insurance premiums. FIRMs are updated due to changes in topography, construction activity, and the availability of more accu-

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What are the Differences Between Tsunami Evacuation Zones and Flood Insurance Rate Maps?



Higher Regulatory Standards



What are the Differences Between Tsunami Evacuation Zones and Flood Insurance Rate Maps? (continued)



Flood Insurance Committee Corner Articles

Featured Articles ...



Hawaii Hood News

New Technical Bulletin Elevator Installation



Flood Insurance is a Good Thing CRS Communities can Encourage Purchase of Policies



New FEMA Planner for Hawaii

Written by: Eric Simmons, FEMA RIX

Flood Insurance Rate Maps (FIRMs) published by the Federal Emergency Management Agency show flood zones that delineate areas of high flood hazard (for example, Zone AE and VE as seen to the left) as well as medium. low. and unknown flood hazard areas. These zones can be viewed for Hawaii at http://gis.hawaiinfip. org/fhat and http:// msc.fema.gov. The

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 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.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 Jerome Acadimia at (808) 587-0254.

Higher Regulatory Standards Guide

Coastal Construction and the NFIP Workshop

The Department of Land and Natural Resources (DLNR) and FEMA Region IX are offering a valuable training opportunity for Engineers, Architects, Surveyors, and Community Officials. This 4-hour workshop will go over the National Flood Insurance Program (NFIP) regulations for development in a Coastal High Hazard Flood Zone. Topics will include:

- Background on the National Flood Insurance Program;
- Understanding the Importance of the Flood Insurance Rate Maps;
- Floodplain Management Regulations for Coastal Development;
- County Building Permit Process;
- Flood Insurance Implications for Structures Built in a VE Zone.

To register for this FREE training opportunity, please click here to download a copy of the registration form. Seating is limited, so don't delay. Registration deadline is: January 19, 2011. For more information, please contact Kristen Akamine at 587-0281 or Jerome Acadimia at 587-0254.

Maui County Public Open House to discuss Newly Proposed Flood Maps

To learn more about the upcoming mapping changes that will affect Maui County, property owners are encouraged to contact Francis Cerizo (270-7771) or Carolyn Cortez (270-7813) for more info on meetings details. The tentative meeting schedules are as follows:

Date	Location
2/7/11	Hale O'Kupuna Hall (Lanai)
2/0/11	250 S High St #106

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2/8/11 250 S. High St. #106 2/8/11 Wailuku Community Center 2/9/11 Mitchell Pauole Center (Molokai)

Time 12 PM - 3 PM 9 AM - 5 PM 5:30 PM - 8 PM 12 PM - 3 PM

The purpose of the Guide for Higher Regulatory Standards in Floodplain Management is to provide options for communities that want to implement floodplain regulations which reduce flood damage and the overall impacts of floods. These impacts include human risk, environmental damage, property damage, flood insurance claims, displacement of residents, and burden on community infrastructure and services. The Guide is not a substitute for a set of community floodplain regulations, rather it is a guide to enhancing existing regulations with higher standards that will greatly reduce risk, and provide protections to functional floodplains.

Upcoming Events

The higher standards options in this guide are described in detail because they are recommended for safer development and use the natural protection provided by the natural functions and resources of the floodplain. Please note that the model language presented in this document was developed to promote effective floodplain management, and mesh with the FEMA minimum flood damage reduction standards described in 44CFR§60.3. Each community can tailor the model language to meet its own specific needs.

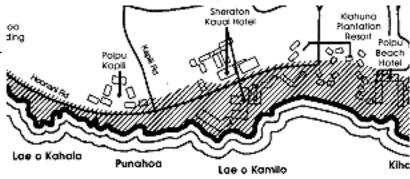
A note about enforcement: Higher regulatory standards are only as good as the enforcement process that supports them. Many of the higher regulatory standards suggested in this guide necessitate increased documentation requirements and enforcement efforts compared to the minimum NFIP standards.

ASFPM strongly believes the minimum NFIP floodplain regulations do not provide adequate long-term flood risk reduction for communities and that the benefits of flood risk reduction achieved by higher regulatory standards

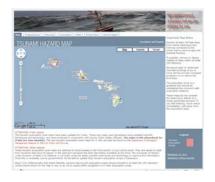
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rate flood hazard information. For the six major Hawaiian Islands, the flood zones along the southern coastlines are being updated using the latest scientific techniques to reflect flood hazards from hurricanes. More information on these maps is available at www.fema.gov/hazard/map/firm and specific questions on FIRMs can be emailed to:

FEMAMapSpecialist@riskmapcds.com



Portion of the Tsunami Evacuation Map for the Poipu Area of Kauai



Tsunami evacuation zones, as seen below, are established by the individual Hawaiian Counties in conjunction with State public safety officials and are viewable at http:// tsunami.csc.noaa.gov/map.html. These maps identify areas that may be impacted by a tsunami and must be evacuated under a tsunami warning. The tsunami maps are not inundation maps, like the Flood Insurance Rate Maps. The tsunami evacua-

tion maps have been recently updated for Oahu and are being updated statewide. The new zones on these maps were developed using updated technology. In some instances the new maps identify wider evacuation zones. Citizens can obtain general information about tsunami evacuation zones by visiting the website at www.pdc.org/iweb/tsunami_zones.jsp.



A comparison of these two different types of maps is provided below.

	Tsunami Evacuation Zones	Flood Insurance Rate Maps
Purpose of Map	Informational to plan for evacuation during a tsunami	Insurance rating, determination of what structures may require flood insurance, and floodplain management.
Map Source	County with data developed by the State of Hawaii Civil De- fense	Federal Emergency Management Agency.
Type of Floods Depicted on Map	Tsunami	Riverine and coastal flooding due to tropical storms and hurricanes, heavy rainfall, and -in some areas- tsunami or levee failure. Flood zones are based on the 1% annual chance (100-year) event and, where available, the 0.2% annual chance (500-year) event.
Information on Map	Evacuation area impacted by worst-case tsunami	Flood hazard zones, cross section/transect locations, hydraulic structures, base flood elevations, etc.

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The Flood Insurance Committee's Corner

Article written by:

Flood Insurance Committee Co-Chairs Gary Heinrichs & Bruce Bender for ASFPM News and Views Publication.



You Better Watch Out; You Better Not Pout; You Better Not Cry, 'Cause I'm Telling You Why...

PRP Extension Is Comin', to Town!

Yes, unless you have been asleep under an old paper flood map, you probably know that January 1st is more than just the day the nation is recovering from a large hangover. It is the date that the new Two-Year PRP Extension kicks off. It is FEMA's gift to people who have been newly mapped into a high-risk area (technically known as a Special Flood Hazard Area, or SFHA). And FEMA has made it available for not only those being newly mapped into an SFHA from January 1st onward, but FEMA is also extending the PRP benefits to property owners whose buildings were newly mapped into an SFHA during the period of October 1, 2008 – December 31, 2010. So, if a building was in an X, shaded X, B, C, or D zone (yes, even the "no one really knows me" D zone) and is mapped into a zone beginning with the letters A, or V (too many to list), they may be eligible for an additional two years of coverage at the low PRP rates! Now, we say "may" as it still has to be eligible which means it passes the minimum claims and disaster aid test.

The savings can be substantial. For example, for \$200K building/\$80K contents coverage, a PRP is \$343 on January 1st. Compare that to the grandfathered X zone premium of \$1,439. So, for two years after the map change, and BEFORE policyholders have to grandfather, they will save \$2,792. That is almost 3 GRAND!!! That's huge in almost anyone's family budget (okay at least for ours!).

For more details, go to: www.FloodSmart.gov/PRPExtension or www.fema.gov/business/nfip/prp_state_local_off.shtm





Flood Insurance and Community Recovery

The one-year anniversary of the devastating Atlanta floods has just passed; the Tennessee floods of last spring are still fresh on the minds of many in the Volunteer State; hurricanes have brushed the East Coast and Midwest flooding just doesn't seem to stop! Consequently, it's an opportune time for community officials to promote the advantages of flood insurance and examine what industry professionals and other stakeholders can do to increase local awareness of flood risk and how flood insurance can lessen the burden for those property owners who have suffered from flooding.

When reviewing the history of flooding and flood recovery in this country, three important conclusions stand out from the rest:

- Flooding doesn't just happen in floodplains.
- Not enough people have flood insurance.
- Even if you're "lucky" enough to get it, disaster assistance will not make you whole after a flood.

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People without the needed financial resources may not be able to make full repairs to their home and may move back into an unsafe or unsanitary structure, if at all. Neighborhoods deteriorate over time if homes are not brought up to standard, resulting in social problems and reductions in the tax base. We have seen this far too many times.

Businesses with the proper coverage can repair, reopen, and put their employees back to work faster, generating much-needed revenue and providing a sense of "normalcy" in the heart of the community which can be difficult to restore after a devastating flood. The Institute of Business and Home Safety (IBHS) reports that one of out every four businesses do not open after a disaster, as they are not properly financially prepared.

Most flood events never result in a federal disaster declaration. No declaration means no disaster assistance to repair the damage caused by the flooding. No disaster assistance means no grants, loans, or temporary housing – no nothing! Even if there is a declaration, most federal assistance is limited to either limited grants or disaster loans. While the interest rate is generally lower, it is still a loan that has to be repaid along with any existing mortgages, thus imposing further financial hardship on people who are struggling to recover.

The simple truth is that residents and business owners with adequate flood insurance rebuild and recover faster and return to normal faster than people without. This means faster and more complete community recovery. Unfortunately, many local officials do not consider it their responsibility to promote flood insurance.

- Experience has shown that an insured community is a better prepared community. As a local official, you can help prepare your community for the next flood. Here are some ideas: Check the amount of coverage in your community. You can ask your FEMA Regional Office for a list of insurance policies (CRS communities get this list once each year). Are certain areas underinsured? Do people outside the mapped floodplain have policies? How many repeatedly damaged (repetitive loss) structures are in the community?
- Promote the advantages of flood insurance in town newsletter articles, public service announcements, town events, and other outreach projects;
- Help insurance agents, real estate agents, and property owners with flood map information;
- Provide insurance agents, real estate agents, and property owners with Elevation Certificates from your building permit files;
- Flood insurance training for agents in your community is available through FEMA. Are your local agents aware of this training? Are you?
- Advise permit applicants for projects in the floodplain about the advantages of flood insurance and building higher than minimum standards; and
- Buy flood insurance for community-owned buildings to set a good example and to be prepared for the next flood (disaster assistance for flooded public properties will be reduced by the amount of insurance the community should have).

For communities, the lesson is clear: preparing for flooding and pursuing flood mitigation strategies are important, however it is equally critical to prepare for the financial burdens which will be placed on the community and its residents and businesses when the next flood occurs. Don't count on federal disaster assistance to make your community whole again. Self-reliant communities know that flood insurance is the only guaranteed vehicle to assure a smooth and complete recovery for everyone affected.



These articles are produced by the ASFPM Insurance Committee. Send your questions about flood insurance issues to InsuranceCorner@floods.org and they will be addressed in future issues of ASFPM News and Views

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 Changes to the flood hazard information shown on the effective Flood Insurance Rate Maps.

City & County of Honolulu

Type: LOMA FIRM Panel 0105G Effective Date of the Revision: October 12, 2010 FEMA Case Number: 10-09-3933A Flooding Source: KiiKii Stream

On-line readers can view LOMC here

IMPORTANT REMINDER: New flood maps for Oahu are scheduled to become effective on January 19, 2011.

Kauai County

Type: LOMA FIRM Panel 0258E Effective Date of the Revision: October 26, 2010 FEMA Case Number: 11-09-0016A Flooding Source: Waimea River; Shallow Flooding

On-line readers can view LOMC here

Maui County

Type: LOMA FIRM Panel 0580E Effective Date of the Revision: November 23, 2010 FEMA Case Number: 11-09-0335A Flooding Source: Pacific Ocean

On-line readers can view LOMC here

Type: LOMA FIRM Panel 0670E Effective Date of the Revision: August 12, 2010 FEMA Case Number: 10-09-2874A Flooding Source: Pacific Ocean

On-line readers can view LOMC here

Hawaii County

Type: LOMA FIRM Panel 0683C Effective Date of the Revision: September 16, 2010 FEMA Case Number: 10-09-2693A Flooding Source: Kaloko Fishpond, Shallow Flooding

On-line readers can view LOMC here

LOMCs can also be viewed and downloaded from the Hawaii Flood Hazard Assessment Tool (FHAT) at www.hawaiinfip.org



New Technical Bulletin

Elevator Installation for Buildings Located in a Special Flood Hazard Area

FEMA has recently issued (Nov 2010) a revised version of Technical Bulletin 4 providing guidance on the NFIP regulations concerning the installation of elevators below the Base Flood Elevation in Special Flood Hazard Areas (both A and V Zones).

"Protecting buildings constructed in special flood hazard areas (SFHAs) from damage caused by flood forces is an important objective of the National Flood Insurance Program (NFIP). In support of this objective, the NFIP regulations include minimum building design criteria that apply to new construction, repair of substantially damaged buildings, and substantial improvement of existing buildings in SFHAs. The base flood is used to delineate SFHAs on Flood Insurance Rate Maps (FIRMs) prepared by the NFIP. The base flood is the flood that has a 1-percent chance of being equaled or exceeded in any given year (commonly called the "100-year" flood). Key terms used in this Technical Bulletin are defined in the Glossary.

In many cases, the NFIP requires that buildings in the floodplain be elevated several feet above the ground. As a result, use of elevators within SFHAs is becoming more common in residential and non-residential construction to facilitate access and to comply with the standards outlined in the Americans with Disabilities Act of 1990 (ADA).

This Technical Bulletin provides information on the proper installation of elevators in SHFAs to reduce flood damages. Elevator types and their associated equipment are described, along with practical methods of protecting elevators from flood damage.

The guidelines within this bulletin meet NFIP regulations pertaining to elevators. These recommendations serve to encourage loss prevention measures that reduce the level of damage that can occur, the resultant repair costs, and the time the elevator is out of service. If these guidelines are followed, restoration of elevator service to the building can be accomplished as quickly as possible once floodwaters recede and power is restored."



To download a copy: http://www.fema.gov/library/ viewRecord.do?fromSearch=fromsearch&id=1717

Source: FEMA

Flood Insurance is a *Good* Thing CRS Communities can Encourage Purchase of Policies

By: Gary Heinrichs and Bruce Bender Co-Chairs

Editor's Note: Communities that participate in the CRS can receive credit points for promoting flood insurance, but that's not the most important reason for supporting the purchase and maintenance of building and contents coverage. This article, excerpted from one that appeared in the Association of State Floodplain Managers' News & Views, reiterates the rationale for making flood insurance a priority in any community's flood mitigation approach.

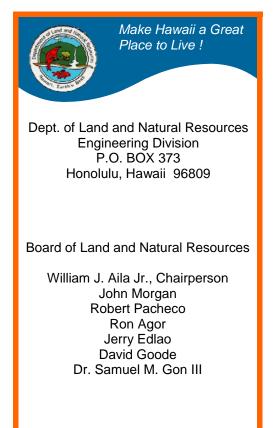
Self-reliant, sustainable communities know that flood insurance is the only vehicle guaranteed to assure a smooth and complete recovery from a damaging flood. Experience has shown that an insured community recovers more quickly and more thoroughly than it would if no insurance were in place. Consider that:

- People without the needed financial resources may not be able to make full repairs to their homes after a flood and may move back into an unsafe or unsanitary structure—if they move back at all. In either circumstance, neighborhoods can be prone to deterioration over time, which tends to result in social problems and also undermines the tax base.
- One of out every four damaged businesses does not re-open after a disaster, because they are not financially prepared to do so, according to the Institute of Business and Home Safety. Business closures reverberate through the local economy and the community, as jobs are lost, tax revenues decline, and consumer spending is disrupted.
- Very few floods are declared federal disasters. No declaration means no federal grants, loans, or temporary housing funds for the people or for the local government. And even in the few cases in which there is a disaster declaration, the vast majority of federal assistance to households comes in the form of small, restricted grants and disaster loans.

The good news is that flood insurance can remedy these situations. Renters and homeowners with building and/or contents coverage are assured of quick financial help to recover and to repair or rebuild. Businesses with the proper flood insurance coverage can repair, reopen, and put their employees back to work faster. Further, insured properties are eligible for Increased Cost of Compliance (ICC) payments—an additional source of funding that helps in local re-development. All of these circumstances generate a sense of well-being and positive outlook in a flood-damaged community.

Local officials can help their communities get ready for the next flood by making flood insurance a high priority. Here are some ideas:

- Promote the advantages of flood insurance in town newsletter articles, public service announcements, town events, and other outreach projects.
- When residents apply for permits for projects in the floodplain, remind them that their homeowners' policy does not cover flooding, but they can purchase it through their own insurance agent.
- Check the amount—and distribution—of flood insurance coverage in your community to see if some areas need to be targeted for receiving additional information. (CRS communities get a list of local flood insurance policies from FEMA once every year).
- Supply elevation certificates from your building permit files to insurance agents, real estate agents, and property owners.
- Let the insurance agents in your community know that training in flood insurance is available. Better yet, arrange training sessions for them.



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far outweighs the burden of administering them.

You can view the full paper including all the specific regulation recommendations at: http://www.floods.org/ace-files/documentlibrary/committees/Insurance/ASFPM_Higher_Standards_Reference_Guide_1010.pdf



Source: ASFPM News and Views, December 2010

Continued from Page 7 "Flood Insurance is a Good Thing...."

- Don't forget to explain the Preferred Risk Policy in all your promotional work.
- Buy flood insurance for community-owned buildings. This sets a good example and also ensures that the community will have financial resources for repair and rebuilding. Remember, even if a federal disaster is declared, the amount of assistance provided for flood-damaged public property will be reduced by the amount of insurance coverage the community should have had.

Article reprinted from the NFIP/CRS Update August - September 2010 [excerpted from ASFPM's News & Views 22(5) 2010, pp. 8-9]

New FEMA Planner for Hawaii

Ms. Sarah Owen is Hawaii's new flood planner. She has been with FEMA for the past 6 years and works in their Oakland, California office. Sarah has worked extensively with regulations and compliance in Nevada and Northern California. Her persistent and dedicated efforts helped bring several Nevada communities into compliance with the NFIP. She is excited to bring her experience to Hawaii and help our communities maintain good standing in the NFIP program. In addition, Sarah is also the NFIP Training Coordinator for FEMA Region IX. She will be making her first appearance in Hawaii in early February to deliver the "Coastal Construction and the NFIP" workshop and an Elevation Certificate training at the Hawaii Land Surveyor Association's annual conference.

Sarah graduated from Sonoma State University with a B.S. degree in Geology. Shortly afterwards, she served in the Peace Corps in Kazakhstan as an Environmental Educator. Upon her return, Sarah worked for several years as a geologist doing environmental consulting focusing on categorization and remediation of groundwater and soil contamination due to leaking underground storage tanks.