


Wai Halana

Hawaii Flood News

FEMA Publishes BFE Notices Online

Base Flood Elevation (BFE) Notices for Preliminary Flood Insurance Studies and Letters of Map Revision (LOMR)

Select a state for information about BFE notices within the state.*



U.S. Trust Territory of the Pacific Islands American Samoa Guam U.S. Virgin Islands

Community Listing for

Enter Case #: OR

Select Community:
(None)

In accordance with Part 67 of the National Flood Insurance Program (NFIP) regulations, the Department of Homeland Security's Federal Emergency Management Agency (FEMA) publishes a notice to all citizens when a new or revised Flood Insurance Rate Map (FIRM) is prepared and FEMA proposes new or modified Base Flood Elevations (BFEs) for a community on that FIRM, including revisions that are effected by Letter of Map Revision (LOMR). This notice describes the proposed changes and lists the existing BFEs, proposed BFEs, and/or proposed modified BFEs for a community. The notice is published twice within a 10-day period in the community's local newspaper, and the statutorily required 90-day appeal period begins on the date of the second publication in the newspaper. Because these notifications can be lengthy, depending on the number of flooding sources for which FEMA is proposing new or modified BFEs, FEMA expends a significant amount of money each year to publish these notices in local newspapers. To make publication of these notifications more cost effective while making the notifications even more readily accessible to citizens, FEMA will begin publishing BFE notices on its Website for all appeal periods starting after **April 1, 2007**. FEMA will continue to publish a standard legal notice in the local newspaper without the BFE information included; the notice will direct in-

terested citizens to the location on the FEMA Flood Hazard Mapping Website where the BFE information will be posted (<http://www.fema.gov/plan/prevent/fhm/bfe>). Interested citizens can also obtain a copy of the BFE information for their community by calling the FEMA Map Assistance Center, toll free, at 1-877-FEMA MAP (1-877-336-2627). To assure the widest possible distribution of this procedural change, FEMA is distributing notifications of the change with correspondence that is sent to community officials and requesting that those officials inform their citizens about the change.



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Wai Halana is published quarterly by the Department of Land and Natural Resources, 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.

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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.

Upcoming Events

For current info on any of the listed events, visit: www.hidlnr.org/eng/nfip

Insurance Agents
National Flood Insurance Basics
June 12 and 13, 2007

For registration form or info: visit
www.hidlnr.org/eng/nfip or call HIIA
at 531-3125.



FEMA Elevation
Certificate Training

August 13, 2007 - Maui
August 14, 2007 - Kona
Visit: www.hidlnr.org/eng/nfip for
training and registration info.

3rd Annual Hawaii Floodplain
Managers Conference
August 15 - 16, 2007
Kona, Hawaii
Visit: www.hidlnr.org/eng/nfip for info.

31st Annual Association of State
Flood Plain Managers Conference
June 3 - 8, 2007
Norfolk, Virginia

For conference info
visit: www.floods.org



Honolulu has a New Department of Emergency Management

After the February 21, 2007, Honolulu City Council approval of Resolution 07-037, City and County of Honolulu's Mayor Mufi Hannemann formally announced the establishment of the new Department of Emergency Management. The new Department will replace the Oahu Civil Defense Agency.

According to the City's press release (M-18-07), Mayor Hannemann said, "This change recognizes the expanded role the Oahu Civil Defense Agency has played in the administration and oversight of federal homeland security programs for the City and protecting the populace.

The article also stated, "The Department of Emergency Management will not replace or control the activities of City first responders. The primary role of the department will be to coordinate and facilitate emergency op-

erations, training, information sharing, and federal Department of Homeland Security grant application and administration. In the event of an emergency, DEM will activate the City's Emergency Operating Center to ensure the timely and accurate dissemination of critical emergency information to the public."

Mr. Peter Hirai, was named acting administrator of the Oahu Civil Defense Agency. According to the City's press release, Hirai said: "We are modernizing and emerging into the 21st century with additional duties and responsibilities that have been placed on us since 9/11". "This elevation from an agency to a department will enhance our role in the protection of the residents and visitors on Oahu. We will continue to work with other City entities to prepare for, prevent, and recover from a disaster."



Dam Safety Program – Legislative Update



The Hawaii Dam Safety program continues to work with dam owners and operators across the state to enhance the program for monitoring and enforcing the safety of dams throughout the State.

In January 2007 Special Deputy Attorney General Robert Godbey, released the “Report of the Independent Civil Investigation of the March 14, 2006, Breach of the Kaloko Dam”. The report included a summary of findings, conclusions, recommendations, photos, proposed legislation and administrative rules, which can be viewed at: <http://www.kalokodam.net/>

The recommended proposed legislation and administrative rules ended up as a basis for several bills introduced in the 2007 Legislative Session. As this newsletter is published, the end of the legislative session is approaching. The Dam Safety program anticipates positive changes to the Hawaii Revised Statutes, Chapter 179D, which would become effective July 1, 2007. If successful with changes to the statutes, the program will then embark on revising the Hawaii Administrative Rules, Title 13, Subtitle 7, Chapter 190 as applicable to ensure consistency with the statutes. The program encourages those in the dam safety industry to play an active role in any legislative or rule change.

Numerous bills relating to Dam Safety were introduced, however only two bills remain and are being reviewed by the House and Senate:

HB0652, HD2/SD1 and SB1946, SD2/HD1

Both bills are very similar and add extensive provisions to the dam safety chapter to improve safety of dams and reservoirs in the State. The bills clarify the Department of Land and Natural Resources’ right to enter property, public or private, to inspect dams and adds a section for dam owner responsibilities. They also allow for the Board of Land and Natural Resources to require a certificate of approval to impound water and makes an appropriation.

For more information on happenings at the Legislature the following is a list of bills introduced this 2007 session, which can be viewed at:

Hawaii State Legislature
Status and Documents
(www.capitol.hawaii.gov/SITE1/docs/docs.asp?press1=docs)

House Bills

- ◆ HB652
(companion to SB656)
- ◆ HB1185
- ◆ HB1810
- ◆ HB1905

Senate Bills

- ◆ SB656
(companion to HB652)
- ◆ SB1530
(companion to HB1185)
- ◆ SB1945
- ◆ SB1946



Dam Safety Inventory Update Project

Notice to all Dam Owners and Operators – Department of Land and Natural Resources (DLNR) has contracted with the consultant Oceanit to conduct a field verification of dam inventory data for all regulated dams and selected unregulated dams. Oceanit will be conducting site visits and require access to dam facilities. Inventory work is anticipated to involve a half-day site visit and request for a representative be available to accompany the Oceanit team in the field. Individual letters will be forthcoming and Oceanit will contact each owner by phone to arrange individual visits.

The site visit will include a physical walk through of the dam face, upstream and downstream slope, crest, abutments, inflow and outlet structures, spillway, and other pertinent features. Vegetation control and maintenance will greatly help in the collection of accurate data, which will include photos, GPS points and any physical observations and measurements that are possible. We solicit your help in clearing areas for accessibility to help collect the best possible information for this inventory project. If you have any questions, please feel free to contact Denise Manuel at (808) 587-0246 for further information.





Septic Systems - What to Do after the Flood

Where can I find information on my septic system?

Please contact your local health department for additional advice and assistance. For more information on onsite/decentralized wastewater systems, call the National Environmental Services Center at (800) 624-8301 or visit their website at www.nesc.wvu.edu*

Do I pump my tank during flooded or saturated drainfield conditions?

No! At best, pumping the tank is only a temporary solution. Under worst conditions, pumping it out could cause the tank to try to float out of the ground and may damage the inlet and outlet pipes. The best solution is to plug all drains in the basement and drastically reduce water use in the house.

What if my septic system has been used to dispose wastewater from my business (either a home-based or small business)?

In addition to raw sewage, small businesses may use their septic system to dispose of wastewater containing chemicals. If your septic system that receives chemicals backs up into a basement or drain field take extra precautions to prevent skin, eye and inhalation contact. The proper clean-up depends of what chemicals are found in the wastewater. Contact your State or EPA for specific clean-up information.

What do I do with my septic system after the flood?

Once floodwaters have receded, there are several things homeowners should remember:

- Do not drink well water until it is tested. Contact your local health department.
- Do not use the sewage system until water in the soil absorption field is lower than the water level around the house.
- Have your septic tank professionally inspected and serviced if you suspect damage. Signs of damage include settling or an inability to accept water. Most septic tanks are not damaged by flooding since they are below ground and completely covered. However, septic tanks and pump chambers can fill with silt and debris, and must be professionally cleaned. If the soil absorption field is clogged with silt, a new system may have to be installed.

- Only trained specialists should clean or repair septic tanks because tanks may contain dangerous gases. Contact your health department for a list of



- septic system contractors who work in your area.
- If sewage has backed up into the basement, clean the area and disinfect the floor. Use a chlorine solution of a half cup of chlorine bleach to each gallon of water to disinfect the area thoroughly.
- Pump the septic system as soon as possible after the flood. Be sure to pump both the tank and lift station. This will remove silt and debris that may have washed into the system. Do not pump the tank during flooded or saturated drainfield conditions. At best, pumping the tank is only a temporary solution. Under worst conditions, pumping it out could cause the tank to try to float out of the ground and may damage the inlet and outlet pipes.
- Do not compact the soil over the soil absorption field by driving or operating equipment in the area. Saturated soil is especially susceptible to compaction, which can reduce the soil absorption field's ability to treat wastewater and lead to system failure.
- Examine all electrical connections for damage before restoring electricity.
- Be sure the septic tank's manhole cover is secure and that inspection ports have not been blocked or damaged.
- Check the vegetation over your septic tank and soil absorption field. Repair erosion damage and sod or reseed areas as necessary to provide turf grass cover.

Remember: Whenever the water table is high or your sewage system is threatened by flooding there is a risk that sewage will back up into your home. The only way to prevent this backup is to relieve pressure on the system by using it less.

1. What are some suggestions offered by experts for homeowners with flooded septic systems?
2. Use common sense. If possible, don't use the system if the soil is saturated and flooded. The wastewater will not be treated and will become a source of pollution. Conserve water as much as possible while the

- system restores itself and the water table falls.
3. Prevent silt from entering septic systems that have pump chambers. When the pump chambers are flooded, silt has a tendency to settle in the chambers and will clog the drainfield if it is not removed.
 4. Do not open the septic tank for pumping while the soil is still saturated. Mud and silt may enter the tank and end up in the drainfield. Furthermore, pumping out a tank that is in saturated soil may cause it to "pop out" of the ground. (Likewise, recently installed systems may "pop out" of the ground more readily than older systems because the soil has not had enough time to settle and compact.)
 5. Do not dig into the tank or drainfield area while the soil is still wet or flooded. Try to avoid any work on or around the disposal field with heavy machinery while the soil is still wet. These activities will ruin the soil conductivity.
 6. Flooding of the septic tank will have lifted the floating crust of fats and grease in the septic tank. Some of this scum may have floated and/or partially plugged the outlet tee. If the septic system

- backs up into the house check the tank first for outlet blockage. Clean up any floodwater in the house without dumping it into the sink or toilet and allow enough time for the water to recede. Floodwaters from the house that are passed through or pumped through the septic tank will cause higher flows through the system. This may cause solids to transfer from the septic tank to the drainfield and will cause clogging.
7. Locate any electrical or mechanical devices the system may have that could be flooded to avoid contact with them until they are dry and clean.
 8. Aerobic plants, upflow filters, trickling filters, and other media filters have a tendency to clog due to mud and sediment. These systems will need to be washed and raked.

** The link provides additional information that may be useful or interesting and is being provided consistent with the intended purpose of the EPA Web site. However, EPA cannot attest to the accuracy of information provided by this link or any other linked site. Providing links to a non-EPA Web site does not constitute an endorsement by EPA or any of its employees of the sponsors of the site or the information or products presented on the site. Also, be aware that the privacy protection provided on the EPA.gov domain (see Privacy and Security Notice) may not be available at the external link.*



Common Legal Questions *About Floodplain Regulations in the Courts*

The following is the fourth of several installments of "Common Legal Questions about Floodplain Regulations in the Courts". The material presented in this article was reproduced from a Association of State Floodplain Managers' document prepared by Jon A. Kusler, Esq.

May a regulatory agency be liable for issuing a regulatory permit for an activity that damages other private property?

Yes, quite possibly. In fact a careful analysis of hundreds of cases in which the lawsuit involved permitting indicates that a municipality is vastly more likely to be sued for issuing a permit for development that causes harm than for denying a permit based on hazard protection or "no adverse impact" regulations. The likelihood of a successful lawsuit against a municipality for issuing a permit increases if the permitted activity results in substantial flood, erosion or other physical damage to other private property owners. However, some states specifically exempt state agencies and local governments from liability for issuing permits.

Do local governments need to adopt comprehensive land use plans before adopting floodplain regulations?

Statutes authorizing local adoption of floodplain ordinances and bylaws do not require prior comprehensive planning. However, many local zoning enabling acts require that zoning regulations be in accord with a comprehensive plan. Traditionally courts have not strictly enforced this requirement and have often found a "comprehensive plan" within the zoning regulations.

Courts have also endorsed comprehensive planning and regulatory approaches as improving the rationality of regulations although they have also upheld regulations not preceded by such planning in many instances.

Acknowledgements

This summary was prepared for the Association of State Floodplain Managers (ASFPM) by Jon Kusler, Esq., Associate Director of the Association of State Wetland Managers. Preparation involved a review of the legal literature on floodplain regulations as well as the last 15 years of federal and state case law concerning floodplain regulations. Detailed reviews of cases from period 1960-1990 were prepared by Kusler in an earlier document.

Edwards A. Thomas, Esq. Provided extensive review of this document. Funding was provided by The McKnight Foundation and the ASFPM Foundation. Opinions expressed in the document are those of the authors and do not necessarily reflect the view of the sponsoring organizations.



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 0880C

Effective date of revision: October 16, 2006

FEMA Case No. : 06-09-B047P

Follows CLOMR Case No.: 97-09-675R

Flooding Source: Waiakea Stream

Description of Revision:

A hydraulic analysis was performed to incorporate natural changes, channel improvements, and updated topographic information, which resulted in a revised delineation of the regulatory floodway, increases and decreases in Special Flood Hazard Area (SFHA) width, and increases and decrease in BFEs for Waiakea Stream from just upstream of Lanikaula Street to approx. 2100 ft upstream of Lanikaula Street.

On-line reader can view LOMC [here](#)

Kauai County

FIRM Panel 0055E, 0313E

Effective date of revision: January 26, 2007

FEMA Case No. : 07-09-0537P

Flooding Source: Pacific Ocean

Description of Revision: Map Update

On-line reader can view LOMC [here](#)

Maui County

FIRM Panel 0153C, 0161C

FBFM Panel 0161

Effective date of revision: May 24, 2007

FEMA Case No. : 05-09-A226P

Flooding Source: Hahakea Gulch

Description of Revision:

A hydraulic analysis was performed to incorporate updated topographic information approx. 130 ft. downstream to approx. 2850 ft upstream of Cane Haul Road and has resulted in a revised delineation of the regulatory floodway, increases and decreases in SFHA width, and increased and decreased BFEs for Hahakea Gulch.

On-line reader can view LOMC [here](#)

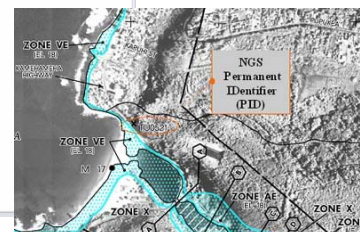
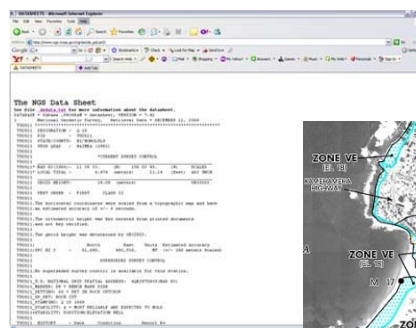
Bench Mark Data Where'd they go?

Have any of you wondered where the old "RM" (Reference Mark) data went after FEMA converted Oahu and Kauai's Flood Insurance Rate Maps (FIRM) into Digital format?

Those benchmark data is no longer being printed directly on the FIRM panels. Instead, FEMA refers map users to the National Geodetic Survey (NGS) for benchmark information.

The Benchmarks illustrated on the State of Hawaii's Digital Flood Insurance Rate Maps for Oahu and Kauai are referenced using the NGS Permanent Identifier (PID). The Hawaii Benchmark Datasheets for Oahu and Kauai are easily accessed through the Hawaii NFIP website: www.hidlnr.org/eng/nfip.

Once in our home page, click onto "FLOOD HAZARD MAPPING" and select the "Bench Mark Data" in the Engineers/Surveyors most requested topics or bookmark: <http://www.hidlnr.org/eng/nfip/Mrt5.aspx>



Incorrect Benchmark Elevation

An error in the elevation data for RM15 shown on the November 20, 2000 FIRM panel 0020E was discovered. The elevation printed on the 2000 map for RM15 was 19.923 ft NGVD. However according to the NGS, the correct elevation for this benchmark is 12.92. This benchmark, also referred to as TU0517 or U15, is not identified on the current effective DFIRM panel 0020F (September 20, 2004). To view a copy of the NGS data-sheet, click [here](#)

RM15	19.923	C&G bench mark disk, 7 miles northwest along State Highway 83 from the Kehuku Plantation Company Headquarters at Kohuku, in the top and 1.2 feet northeast of the southwest end of the southeast concrete headwall of double 3-foot by 6-foot concrete box culverts, 18.4 feet southeast of the center line of the highway, 8.4 feet north of telephone pole 296T, and approximately level with the highway.
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Reference mark data from 11/20/00 FIRM panel



Levee Certifications



All across the United States and even in Hawaii, there are thousands of miles of levees. Some of these levees are as old as 150 years. They were built for a variety of reasons. Some were built for agricultural purposes, others for flood protection.

Identifying the flood risk behind levees is an important part of FEMA's Flood Map Modernization. As part of this effort to update existing Flood Insurance Rate Maps (FIRMs), FEMA is re-evaluating areas shown on their FIRMs as providing protection from the base flood or 1-percent chance event.

To make sure that levees shown on modernized FIRMs still provide that level of protection, FEMA issued [Procedure Memorandum No. 34](#) (PM 34) to clarify certification requirements. PM 34 requires levee owners to obtain and submit certain data and documentation to show that their levees continue to provide flood protection from the base flood. Upon re-certification, FEMA will accredit the levee and map the area behind it as having a moderate flood risk.

Because data and documentation compilation and submittal can be a time-consuming process, FEMA clarified the procedures for documenting flood risk in [Procedure Memorandum No. 43](#) (PM 43). PM 43, provides levee owners up to 24 months to obtain and submit the necessary data and documentation. In the meantime, their

DEFINITION

Levee means a man-made structure, usually an earthen embankment, 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.

Source: 44CFR59.1

levee will be considered "provisionally accredited," and most or all of the area behind the levee will be designated Zone X (shaded) on the Digital Flood Insurance Rate Maps (DFIRM).

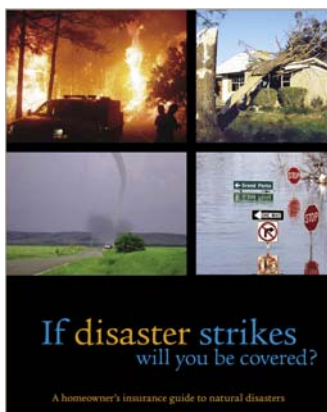
On March 16, 2007, FEMA issued a revised version of PM 43 and several attachments to clarify the procedures that are to be followed for Federal and non-Federal levee projects that are maintenance deficient and USACE is providing communities/levee owners with a one-time only "maintenance deficiency correction period" of 1 year. For additional information on the revised version of PM 43, please visit http://www.fema.gov/plan/prevent/fhm/lv_fpm.shtm

FEMA Region IX is working closely with local community officials in Hawaii to ensure that our FIRM maps accurately reflect the flood risk in areas behind our levees. During the week of March 5th (2007), A team consisting of Mr. Raymond Lenaburg (FEMA RIX), Mr. James Yamamoto (RMTC JV), Mr. Massoud Rezakhani (RMTC JV), Mr. Lincoln Gayagas (USACE, PAO), Mr. Dan Meyers (USACE, PAO), and Ms. Carol Tyau-Beam (DLNR), visited each of Hawaii's four NFIP communities to discuss the levee re-certification process and each communities responsibilities.



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

A Homeowner's Insurance Guide to Natural Disasters



Does your homeowners insurance policy protect your home against flood? How do you file a homeowners insurance claim? What disasters are covered in your policy? These questions and others are answered in a new guide co-published by FLASH and The Actuarial Foundation. Eleven sections will give you basic information about homeowners insurance, tell you how you can lower your premium, give you tips on reducing potential damages due to several disasters, and much more!

This publication can be found on-line at:

http://www.flash.org/pdf/7-13-06FLASH_Insurance_Guide.pdf





*Make Hawaii a Great
Place to Live !*

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FLOODSMART.GOV Estimate Your Premiums

If you've ever visited FLOODSMART.GOV and tried to get an estimate on flood insurance premiums, you'll remember that your search did not include the ability to estimate premiums in a Coastal High Hazard zone.

Well now, FLOODSMART.GOV offers V zone estimates, as well as A zone rates. B, C, and X zone rates are also available. It's a simple and quick way to estimate your flood insurance premiums. Try it out today !!

Hawaii Agents Get Trained

In order to meet the July 1st deadline set by the State Insurance Commissioner for NFIP training, approximately 120 Hawaii insurance agents attended one of four NFIP training sessions conducted on Oahu and Maui during the month of March.

Agents will still have an opportunity to meet the deadline, as Hawaii Independent Insurance Agents Association (HIIA) is planning on hosting two additional workshops in June.

Dates: June 12, 2007 (Session #1)
June 13, 2007 (Session #2)
Time: 8:00 am - 11:30 am
Place: Island Insurance Training Room
1022 Bethel Street, Honolulu, HI.
Cost: \$25 for Island Insurance Producers
\$30 for HIIA Members
\$50 for non-Members

For registration form and info: visit:
www.hidlnr.org/eng/nfip or call HIIA at 531-3125.