



Linda Lingle,
Governor

Hawaii Flood Management News

Special Edition

Department of Land and Natural Resources
Engineering Division

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Visit www.FloodSmart.gov and learn more about your flood risk and the National Flood Insurance Program



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Inside This Issue

- 1 • Recovery - Picking up after the Storm
- 2 • Dealing with Mold and Mildew
• Water Damaged Carpets and Rugs.
- 3 • Emergency Proclamation
• How to File a Flood Insurance Claim
• Beware of Leptospirosis
- 4 • Saving Photographs after the Flood

Recovery

Picking up After the Storm

In the wake of recent flooding blamed on a late winter storm system, many unsuspecting island residents and business owners are now faced with the daunting task of picking up after the storm.

While shoveling out the mud and ripping out the water logged carpet may be at the top of your immediate recovery efforts, FEMA cautions property owners to be on the look out for potential hazards. Although floodwaters may have receded, there may be physical dangers that are not easily recognized at first glance. Flooding can cause structural, electrical and other hazards. FEMA urges care in returning to a flooded home by following these safety tips:

- Check your home before you go in. Carefully check outside your home for loose power lines, gas leaks, foundation cracks or other damage. See if porch roofs and overhangs still have all their supports. If you see damage, a building inspector or contractor should check the building before you enter.
- Turn off the electricity. Even if the power company has turned off electricity to the area, make certain your house's power supply is disconnected.
- If you suspect a gas leak or smell gas, leave your home immediately and call the gas company from a neighbor's house.
- Enter carefully. If the door sticks at the top, it could mean your ceiling is ready to fall. If you force the door open, wait outside the doorway in case debris falls.
- Check the ceiling for signs of sagging. Wind, rain, or deep flooding may wet plaster or wallboard. It is very heavy and dangerous if it falls.
- Make sure the electricity is off and hose down the house to remove health hazards left behind by floodwater mud. Shovel out as much mud as possible. Remove water quickly using a mop or squeegee.

Flood Insurance May Help Reduce Future Damage

If your home or business is damaged by a flood, you may have to meet certain building requirements in your community to rebuild. Help in covering the costs of meeting those requirements may be provided in your flood insurance policy.

Flood insurance policyholders in high risk areas may be eligible to get up to \$15,000 to help pay the costs to bring their home or business into compliance with their community's floodplain ordinance.

If your community officials determine that your home or business has been substantially damaged by the flood, contact the insurance company or agent to file a claim for help in meeting these costs. For more information, call your insurance company, agent or the NFIP toll free at 1-800-720-1090.

When flood waters recede . . .

Dealing with Mold and Mildew

Mold, a common term for fungus, attacks organic material such as paper, cloth and leather. It can stain or destroy these articles, if left untreated.

Mold grows from spores, which are everywhere in our environment and usually inactive. However, they grow when the humidity is more than 75 percent. When temperatures rise above 65 degrees, the likelihood of mold increases.

To stop mold from spreading, lower the humidity and temperature. Open the windows if humidity outside is less than inside; otherwise use air conditioning. Install dehumidifiers and empty them often.

To dispose of moldy objects, seal them in plastic bags and remove them as soon as possible.

Objects you want to save should be dried and cleaned as soon as possible or frozen until you can clean them.

To clean moldy objects, air-dry them away from other objects. Mold spores spread easily. Spread out papers, stand books on end and fan pages open. Use blotting materials such as clean towels or absorbent paper between layers of cloth or paper affected by mold. Increase air circulation with a fan, but don't aim it directly at the objects.

Once the mold is dry (and inactive) gently wipe or brush away the residue. Work outdoors, if possible, and wear protective clothing and respirator.

Be sure items are free of mold before you return any clean objects to its display or storage place. Re-inspect objects from time to time for new mold growth.

To remove mold from walls, baseboards and storage spaces, wash them with a mixture of household bleach and water.

Source: FEMA "Surviving the Storm, a Guide to Flood Preparedness"

Water - Damaged Carpets and Rugs



When faced with floor damaged carpets and rugs, recommendations for cleaning or replacing depend on the contamination level of the water and the length of time the carpet or rugs were saturated. Unsanitary water contains organisms that can infect carpets and rugs and cause health and safety problems.

Clean water may include broken water supply lines, tub, or sink overflows with no containments or rainwater. "Gray water" or unsanitary water, may include discharge from dishwashers or washing machines, punctured waterbeds, or broken aquariums. "Black water" contains pathogenic agents and is extremely unsanitary. It includes flooding from seawater, rivers, or streams. "Gray water" that remains untreated for longer than 48 hours may change to the "black water" category as microorganisms multiply.

If water damage is from a clean water source and it was identified within 48 hours, then cleaning the carpet yourself is an option. If water damage is from gray or black water source, call a professional.

General Guidelines

- Remove and dispose of carpet saturated with "black water". Remove and dispose of carpet padding saturated with "gray" or "black water" (no exceptions).
- Carpet padding can be restored if it has been wet from clean water less than 48 hours and only part of the padding in a room is wet.
- Carpet saturated with "gray water" may be cleaned by a professional using a biocide allowing appropriate contact time and using the hot water extraction cleaning method. (Other cleaning methods including absorbent compound, bonnet, dry foam or shampoo are not adequate and can redistribute contamination).
- Valuable area rugs should be cleaned by a professional. Extensive cleaning and a biocide application should be used. Rugs must be restored to a sanitary condition. If this is not possible, then they must be discarded.
- Washable throw rugs usually can be cleaned adequately in a washing machine with hot water and a biocide. For extra large capacity automatic washers, use 1 1/2 cups of chlorine bleach per load. For standard (large capacity) automatic washers, use 1 cup per wash load. Be aware that this quantity of chlorine bleach may affect the color in the rugs.
- Flood waters can contaminate a private well. Do not attempt to wash washable throw rugs until you know your water is not contaminated.



- Quickly remove any furniture that may be damaged or cause stains or damage to the carpet.
- Limit traffic over the wet carpet. Moisture can weaken the latex backing and walking on the carpet can cause the backing to separate. When the backing dries, it regains most of its original strength.

Cleaning Rain-Soaked Carpets

Cleaning wet carpeting indoors is not a good idea in summer because it adds even more moisture to an already wet area. If the carpeting is installed with track strips, it can be removed, cleaned, and reinstalled. If a large area of the padding is saturated, it will be impossible to clean and dry it thoroughly, so it should be removed and replaced.

The subfloor should be checked for moisture as well. If rainwater soaked from the top, it may not have soaked the sub floor. The type of subfloor under the carpet and the length of time it is wet will determine whether it will need to be replaced. If the subfloor is plywood, the wet carpet and padding should be removed and the subfloor allowed to dry completely before reinstalling. If the subfloor is particleboard it will swell and disintegrate when it gets wet and stays wet for a few days. Thus, it will need to be replaced.

Carpets that are glued to the floor without a pad can be cleaned in place if the damage is from clean water. Use a shop water vacuum, (if there is electricity) and dry blankets and towels to blot up extra moisture. Use oscillating fans and air-conditioner to dry the carpet. This should be done within 24 hours of getting wet; otherwise mold and fungi can grow to numbers that present a health risk to you and your family. If the wet carpet cannot be treated within the 24 hours, then it is better to have professionals remove and replace it.

If only a small area of carpet got wet from a roof or pipe leak, pull up and prop the wet carpet to dry. Cut away the wet padding. To discourage mildew and odors, rinse the backing of the carpet with a solution of 1/4 cup bleach to 1-gallon of water. Brush lightly with a soft bristle brush so that the solution does not soak through and damage the carpet yarns on the other side. Do not use this solution on wool carpets. Use a solution of 3/4 cup bleach to 1-gallon of water to disinfect the subfloor. Do not replace the padding and carpet until the subfloor is completely dry.

Source: North Carolina State University, At&T Stae University Cooperative Extension, Dr. Wilma S. Hammett, Extension Home Furnishing Specialist, and Dr. Sarah Kirby, Extension Housing Specialist.



How to File a Flood Insurance Claim

Call your insurance agent to report your claim. The agent will prepare a Notice of Loss form and an adjuster will be assigned to assist you.

If possible, photograph the outside of the premises, showing the flooding and the damage. Also, photograph the inside of the premises, showing the damaged property and the height of the water.

Separate damaged from undamaged property. Put damaged property in the best possible order for the adjuster's examination.

Dispose of damaged property which presents a health hazard or which may hamper clean-up operations. Be sure to describe adequately all discarded items so that, when the adjuster examines your losses and your records, these articles are included in the documentation.

Compile a room-by-room inventory of missing or damaged goods and include manufacturers' names, dates and places of purchase and prices. Try to locate receipts or proof of purchase, especially for large appliances.

When the adjuster visits your property, let him or her know if you need an advance or partial payment of loss. Good records can speed settlement of your claim.



Emergency Proclamation

On March 2, 2006, Governor Linda Lingle signed an Emergency Proclamation to aid flood devastated residents and business owners along Oahu's East side and also includes portions of Kauai and Maui

The proclamation covers the periods of heavy rains, flooding and mudslides from Monday, February 20, 2006, through Friday, March 3, 2006, and the periods resuming on Wednesday, March 1, 2006 through Friday, March 3, 2006,

According to the News Release, "the proclamation activates programs to make personal and commercial loans available to people whose homes or businesses sustained damage caused by the rains; activates the state's Major Disaster Fund to speed relief and recovery; and authorizes the use of National Guard troops, if necessary, to assist civilian authorities in disaster relief, averting imminent public danger, and to assist in debris removal."

The Hawaii Chapter of the American Red Cross in coordination with State Civil Defense and the Oahu Civil Defense Agency have surveyed the damage to windward Oahu properties. Early estimates indicate that over 111 homes were damaged from the flooding and mudslides.

Beware of Leptospirosis



As tempting as it may be to take that ole boogie board and paddle around in the rain swollen stream, don't risk your health.

The Centers of Disease Control (CDC) and the State Department of Health urge residents to be careful when coming into contact standing water and mud, as it could contain a disease known as Leptospirosis.

Leptospirosis is a bacterial disease that can cause high fever, severe headaches, muscle aches, chills, and vomiting. Incubation period is between 3 - 30 days after exposure. If you've been exposed to contaminated floodwaters and experience these symptoms, seek medical attention.



Department of Land and Natural Resources
Engineering Division
P.O. BOX 373
HONOLULU, HAWAII 96809

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Saving Photographs After the Flood

Source: FEMA and the American Institute for Conservation of Historic & Artistic Works

As flood victims return to their homes and begin the difficult cleanup, federal officials are offering helpful tips on saving family photographs. The Federal Emergency Management Agency (FEMA) is working with the American Institute for Conservation of Historic and Artistic Works (AIC) and Heritage Preservation to make sure flood victims have the benefit of expert advice.



"Photographs and photo albums are often the only records of momentous occasions like weddings, birthdays and graduations," Sarah Wagner, senior photograph conservator at the National Archives and Records Administration (NARA) said. "If the flood has damaged them, saving them may be possible. Remember that if flood waters did not damage the negatives, you can make new prints anytime."



Damaged photographs for which there are no negatives should receive attention first. Once photographs have stuck together or become moldy, saving them may not be possible. Handle wet photos carefully; the surfaces may be fragile. Wet photos may be rinsed in clean water (if needed) and sealed in a plastic garbage bag with a tie or a Zip-Lock type plastic bag. If possible, put wax paper between each photo. If a freezer is available, freeze the photos immediately. Later, photos may be defrosted, separated and air-dried.

If no freezer or refrigerator is available, rinse wet photos in clean water and dry them, face up, in a single layer on a clean surface (a table, window screen or clean plastic laid out on the ground). Avoid drying the photos in direct sunlight. Don't worry if the photos curl as they dry. A photo expert can be contacted later about flattening them.

"Conservators can help you with severely damaged and valuable materials," Wagner said. "The American Institute for Conservation has a free referral service to help people find experts in their area." People can call the American Institute for Conservation for more information at (202) 452-9545.

