How to obtain sandbags and sand PLUS how to fill them

The threat of flooding returns to Humboldt County every winter. Residents in flood prone areas need to take action well ahead of the start of rainfall by stockpiling sandbags, knowing where to get sand, knowing how to fill the bags, and then how to stack them.

It is as important to be prepared for a flood event as it is to be prepared for an earthquake or other natural disaster. The following floodfighting information has been prepared to help property owners protect their land, homes, and businesses.

Planning & Self-Reliance
Are the Keys to Flood Preparation

Provided by:
NOAA National Weather Service
California Department of Water Resources
Humboldt County Office of Emergency Services
Humboldt County Department of Public Works
California Conservation Corps
**Sandbags**

- **A & L Feeds**
  2308 Central Avenue
  McKinleyville
  839-3265

- **Hensell Materials**
  4475 Broadway
  Eureka
  443-9785

- **Main Street Feed**
  1635 Main Street
  Fortuna
  725-5565

- **Nilsen Feed**
  502 Broadway
  Eureka
  442-3741

- **Nilsen Feed**
  1593 Market Street
  Ferndale
  725-5316

- **Three G's Hay and Grain**
  5307 Boyd Road
  Arcata
  826-9537

- **United Rentals**
  3132 Jacobs Avenue
  Eureka
  442-9378

**Sand**

- **Eureka Ready Mix**
  Arcata Boyd Road 822-1795
  Eureka Hilfiker Lane 443-2791
  Alton Hwy 101 at Hwy 36 725-4417
  Blue Lake 1750 Glendale 822-2937

- **Hensell Materials**
  4475 Broadway
  Eureka
  443-9785

- **Hoopa Aggregates**
  Behind Modular Plant
  530-625-4017

- **Kernen Construction**
  1195 Hatchery Road
  Blue Lake
  825-8342

- **Mercer Frasier**
  Cooks Valley 247-3417
  Dinsmore 574-6343
  Fortuna Dinsmore Dr. 725-2151
  Fortuna River Walk Dr. 725-2326
  Willow Creek 530-629-2140

- **Randall Sand and Gravel**
  Sprowel Creek Road
  Garberville
  923-2820

- **Taylor's Supplies**
  1011B W Del Norte
  Eureka
  443-1431

- **Wes Green Landscape Materials**
  6360 West End Road
  Arcata
  822-8035

As Of: April 6, 2011
HOW TO: Fill a sandbag & build a sandbag barrier

1. Work with another person, with one of you holding the bag while the other shovels sand or other material. The first shovelful is placed on the edge of the bag to keep the bag open. The bag holder should bend at the waist, with elbows resting on knees. The shoveler gets rounded scoops of sand and fills the bag to just one-third full. Avoid injury by not twisting while shoveling.

2. Fold over the open end of the bag in a triangle to prevent sand from leaking out. Close-knit burlap bags are recommended.

3. Place a line of bags with the folded side up, with folded edges facing the direction of water flow. Stomp each bag into place. Like you would with bricks, stagger the next layer of bags over the folded tops of the bags underneath. Stomp each layer of bags. To give the structure stability, the base should be 1.5 times wider than the height. (Example, 6 ft. wide by 4 ft. high)

4. When you don't have time to build a sandbag barrier, use a temporary levee to raise low areas. Prepare ahead by buying 20-foot-wide sheets of plastic (6-10 mil thickness). Lay out the length you need and place sand, dirt, or gravel on the half facing your property. Fold over the other half and place a solid row of sandbags on the edge of the plastic to anchor the top edge of the plastic sheet.

5. In locations where water could rise with no current, such as at lake shores, lay visqueen plastic on the ground and up to walls, and form a half pyramid of sandbags. Cover doors and vents with plywood.
MANAGING A FLOOD FIGHT

Planning and management can greatly enhance the effectiveness of a flood fight. Someone should be in charge at all times. They should be coordinating the placement of supplies and the utilization of the flood fighters. They should also be watching for early signs of danger such as rising water and worker fatigue.

FLOOD FIGHT SAFETY

Working on floods involves bringing people and machinery together to combat nature’s changing forces. The sense of urgency often associated with flooding combined with the inevitable fatigue makes for a dangerous combination. The tips below will help you be aware of the possible dangers in advance and plan accordingly. Ultimately, the safety of the people working to protect against flooding is much more important than the property being saved.

- **Changing River Conditions:** Rapid river rises can easily go unnoticed when your attention is diverted during sand bagging. Make sure that someone is monitoring the river conditions and ensuring that workers are not isolated by rising water. Flood fighting should be suspended when the safety of workers is compromised by rising water. Saving property is not as important as saving lives.

- **Swift Water:** High water velocities are common during flooding events. Flood fighting should not be conducted if it requires workers to be near or in swift water.

- **Animal Exposure:** Flooded areas force a variety of animals to evacuate to high ground. Workers in these areas should be aware of these animals, including reptiles, and not handle them.

- **Contamination:** Flooded areas can potentially carry high level of contaminants. Wear protective clothing to help limit contact with water, and always wash thoroughly after working around flood water.

- **Exhaustion:** The stress combined with long, physically demanding hours can take effect on the flood worker. It is very important for someone to watch for and recognize exhaustion and treat it aggressively. Rotating workers out of the most vigorous tasks, and ensuring that breaks are taken, will help eliminate fatigue factors.

- **Body Mechanics:** Care must be taken by flood fighters with regards to work conditions. Safe lifting techniques and weight distribution must be a conscious effort for every individual. Avoid lifting and twisting at the same time by arranging the location of the sand, bags, and workers to minimize the need for rotation. Flooded surfaces can be slippery and cluttered with tripping hazards. Walk slowing and take small steps. Never step into water of an unknown depth.

- **Structural Considerations:** When working around structures, be aware of downed power lines, gas/propane leaks, and unstable structure supports.

- **Safety Gear:** Rain gear, warm clothing, handheld lights, gloves, goggles, hardhat, boots, first aid kit, ropes, floatation devices, hip boots.